Course Description

The following course descriptions are identified by their course codes which are presented in alphabetical order.

ACCT2003 PRINCIPLES OF ACCOUNTING I

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to provide students with a general understanding of basic accounting concepts, accounting cycle (bookkeeping), principles and their applications in some elementary financial accounting topics including cash; current assets and current liabilities; inventory and non-current assets.

ACCT2013 PRINCIPLES OF ACCOUNTING II

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I

Course Description: The objective of this course is to provide students with a general understanding of basic accounting concepts, accounting cycle (bookkeeping), principles and their applications in some selected financial and management topics including partnerships; corporations; non-current liabilities; cash flow statement; financial performance analysis; accounting for manufacturing operations; cost behaviour and CVP analysis; budgeting and budgetary control.

ACCT2033 INTRODUCTION TO FINANCIAL ACCOUNTING (FOR NON-BBA MAJOR STUDENTS)

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to provide students with a general understanding of basic accounting concepts, accounting cycle (bookkeeping), principles and their applications in some elementary financial accounting topics including cash; current assets and current liabilities; inventory, non-current assets and non-current liabilities; cash flow statement and analysis of financial statements.

ACCT2043 PRINCIPLES OF ACCOUNTING I

(3 units)

Pre-requisite(s): None

Course Description: (For non-ACCT students.) The objective of this course is to provide students with a general understanding of basic accounting concepts, accounting cycle (bookkeeping), principles and their applications in some elementary financial accounting topics including cash; current assets and current liabilities; inventory and non-current assets.

ACCT2053 PRINCIPLES OF ACCOUNTING II

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I

Course Description: (For non-ACCT students.) The objective of this course is to provide students with a general understanding of basic accounting concepts, accounting cycle (bookkeeping), principles and their applications in some selected financial and management topics including partnerships; corporations; non-current liabilities; cash flow statement; financial performance analysis; accounting for manufacturing operations; cost behaviour and CVP analysis; budgeting and budgetary control.

ACCT2063 FUNDAMENTAL ACCOUNTING PRINCIPLES

(3 units)

Pre-requisite(s): None

Course Description: The main objective of this course is to provide students with a general understanding of the basic accounting concepts, principles, and their applications in some fundamental financial and managerial accounting topics, including the recording of economic events under the accrual method of accounting; the practical performance of the accounting cycle; the compilation, analysis, and communication of financial statements; cost-volume-profit analysis; the budgeting process; as well as the impact of current ethical standards and disclosure requirements relating to financial reporting.

ACCT3003 COST AND MANAGEMENT ACCOUNTING I

(3 units)

Pre-requisite(s): ACCT2013/ACCT2053 PRINCIPLES OF ACCOUNTING II

Course Description: This course aims to introduce students to the basic concepts and techniques in cost and management accounting; to develop students' ability in using relevant accounting data for management policy determination, decision making and performance evaluation; and to enable students to design and evaluate different cost accounting systems for operational planning and control.

ACCT3013 COST AND MANAGEMENT ACCOUNTING II

(3 units)

Pre-requisite(s): ACCT3003 COST AND MANAGEMENT ACCOUNTING I

Course Description: The course examines the integrative and interdisciplinary role of management accounting and its contribution to strategic management. It focuses on building competencies of management accountants through the understanding and application of contemporary management accounting techniques in various business situations and in different organisations. It also emphasises on the effective evaluation, strategic financial planning, assessment and interpretation of information and performance evaluation.

ACCT3023 HONG KONG TAXATION

(3 units)

Pre-requisite(s): ACCT2013/ACCT2053 PRINCIPLES OF ACCOUNTING II

Course Description: The objective of this course is to provide students with an overview of the general principles and administration of the taxation system in Hong Kong. The course discusses the principles of taxation in general; the territorial source concept of Hong Kong taxation system; the scheduler taxes of the Hong Kong tax system, namely Property Tax, Salaries Tax and

Profits Tax; the personal assessment; the provisional taxes; and the basic matters on Stamp Duty.

ACCT3033 INTERMEDIATE ACCOUNTING I

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I

Course Description: Intermediate Accounting I is the first course of the two Intermediate Accounting courses which extends the study of those students who have finished the introductory course Principles of Accounting I. This course aims to equip students with knowledge and skills of how to apply related accounting standards and treatments to prepare, analyse and interpret the financial statements and information according to the International Financial Reporting Standards (IFRS). This course also serves as the prerequisite course for Advanced Financial Accounting courses.

ACCT3043 INTERMEDIATE ACCOUNTING II

(3 units)

Pre-requisite(s): ACCT3033 INTERMEDIATE ACCOUNTING I

Course Description: Intermediate Accounting II is the second course of two Intermediate Accounting courses which extends the study of those students who have finished Intermediate Accounting I. This course aims to equip students with the knowledge and skills of how to apply related accounting standards and treatments to prepare, analyse and interpret the financial statements and information according to International Financial Reporting Standards (IFRS). This course also serves as the pre-requisite course for the Advanced Financial Accounting courses.

ACCT3053 CORPORATE GOVERNANCE AND ACCOUNTING

(3 units)

Pre-requisite(s): ACCT3033 INTERMEDIATE ACCOUNTING I

Course Description: This course aims to provide students with an overview of the main theoretical perspectives and frameworks of corporate governance, integrating the conformance (control and reporting) and performance (strategies and business growth) dimensions in both the international context as well as the local (Hong Kong and Mainland China) context. Selected cases dealing with the legal sanctions levelled at directors and officers of corporations as well as liability of professional accountants in public practice and business involved in notorious financial scandals are evaluated.

ACCT3063 TAX PLANNING AND MANAGEMENT

(3 units)

Pre-requisite(s): ACCT3023 HONG KONG TAXATION

Course Description: The objective of this course is to provide students with an in-depth study of the law and practice of tax planning and management in the Hong Kong environment. The course will give an analytical review of the Hong Kong tax system with a focus on tax planning so that students can advise management on the effects of taxation and the possible ways for modifying the tax burden of the business. An appreciation of the general aspects of Mainland China taxation is also included.

ACCT3073 COST AND MANAGEMENT ACCOUNTING

(3 units)

Pre-requisite(s): ACCT2033 INTRODUCTION TO FINANCIAL ACCOUNTING (FOR NON-BBA MAJOR STUDENTS)

Course Description: This course aims to introduce students to the basic concepts and techniques in cost and management accounting; to develop students' ability in using relevant accounting data for management policy determination, decision making and performance evaluation; and to enable students to design and evaluate different cost accounting systems for operational planning and control.

ACCT3083 CHINESE TAXATION LAW

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I

Course Description: Chinese Taxation Law is a foundational elective course for business students. This course covers the regulations regarding Chinese taxation, including obligations of taxpayers; types of taxpayers; tax rates; tax assessment guidelines and procedures; as well as tax payment locations and privileges, which relate to different categories of Chinese taxation. The categories encompass turnover tax, enterprise income tax, individual income tax, house property tax, urban real estate tax, behavioural taxes (stamp duty, VAT, business, consumption, tobacco), resource tax, and urban and township land use tax. In addition, the course imparts to students the knowledge of international taxation and taxation administration law. This course aims to provide the basic knowledge of Chinese taxation law as well as the theories and regulations of taxation, thereby allowing the students to understand the importance of taxation in state finance and its inseparable relationship with the economy.

ACCT3093 CHINESE ECONOMIC LAW

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide foundational knowledge in Chinese economic law to business students. It focuses on the workings of the Chinese economic legal system, while allowing students to master the basic knowledge in some key areas, such as contract law, company law, as well as competition and anti-monopoly law. Through a good understanding of the theoretical concepts and learning from actual cases and scenarios, students would heighten their sense of legality and integrity, thereby enhancing their ability to analyse and solve legal issues encountered in real life situations.

ACCT4003 AUDITING I

(3 units)

Pre-requisite(s): ACCT3033 INTERMEDIATE ACCOUNTING I

Course Description: This course aims to provide students with an understanding of the basic concepts and principles of auditing, the statutory audit requirements, extant auditing standards recommended by the Hong Kong Institute of Certified Public Accountants (HKICPA), and auditing in a Computer Information Systems (CIS) environment issues.

ACCT4013 AUDITING II

(3 units)

Pre-requisite(s): ACCT4003 AUDITING I

Course Description: Based on Auditing I, this course aims to provide students with a further understanding of the statutory audit requirements, extant auditing standards recommended by the Hong Kong Institute of Certified Public Accountants (HKICPA), auditing in a Computer Information Systems (CIS) environment, and contemporary auditing issues.

ACCT4023 FINANCIAL ACCOUNTING THEORY

(3 units)

Pre-requisite(s): ACCT3033 INTERMEDIATE ACCOUNTING I, and
ACCT3043 INTERMEDIATE ACCOUNTING II

Course Description: This course is designed to provide students with knowledge on financial accounting theory forming the foundation of accounting standards and practice. During the course, students will study and discuss contemporary and controversial issues in the financial accounting area. In addition, this course will introduce to students the mainstream of accounting research and some accounting research methodologies.

ACCT4033 ACCOUNTING INFORMATION SYSTEMS

(3 units)

Pre-requisite(s): ACCT2013/ACCT2053 PRINCIPLES OF ACCOUNTING II

Course Description: The objective of this course is to provide students with an in-depth study of the application of information systems knowledge to the accounting environment. The course covers the processing of accounting data in computer environment; designing business processes and representing them with documentation tools; and the controls that are necessary to assure accuracy and reliability of the data processed by the accounting system.

ACCT4043 ADVANCED ACCOUNTING I

(3 units)

Pre-requisite(s): ACCT3033 INTERMEDIATE ACCOUNTING I, and
ACCT3043 INTERMEDIATE ACCOUNTING II

Course Description: This course aims to provide students with a comprehensive discussion of the concepts and techniques of preparing consolidated financial statements for a group of companies. The objectives of the course are understanding the underlying accounting concepts and governing accounting standard in respect of group company financial statement preparation; developing the skill and professional competence in the preparation and reporting of group company financial statements; appraising, analysing and interpreting critically the financial statement of group companies. Emphasis is placed on the impact of local business environment and legal requirements. Also, students are expected to understand the implications of the relevant IAS and IFRS on the preparation of consolidated financial statements of a group.

ACCT4053 ADVANCED ACCOUNTING II

(3 units)

Pre-requisite(s): ACCT3033 INTERMEDIATE ACCOUNTING I, and
ACCT3043 INTERMEDIATE ACCOUNTING II, and
ACCT4043 ADVANCED ACCOUNTING I

Course Description: This course aims to provide students with a comprehensive discussion of the concepts and techniques of preparing consolidated financial statements for a group of companies. The objectives of the course are to explain accounting concepts and governing accounting standard in respect of financial statement preparation of complex group structures; develop professional competence in the financial reporting complex issues such as accounting for derivatives, financial instruments and hedge accounting, accounting for the effects of changes in foreign exchange rates, income tax and share-based payments; interpret financial statements of group companies. Emphasis is placed on the impact of local business environment and legal requirements. Also, students are expected to understand the implications of the relevant IAS and IFRS on the preparation of consolidated financial statements of a group.

ACCT4063 ACCOUNTING INTERNSHIP

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I, and
ACCT2013 PRINCIPLES OF ACCOUNTING II

Course Description: This course aims to provide an opportunity for students to gain real-life working experience in accounting, finance or related organizations. The primary intention of this course is to provide the opportunity for students to work in various departments related to their discipline including auditing, taxation, financial accounting, and corporate governance functions. A secondary intention is for students to use the internship placement to broaden their own experience beyond the limitations of their chosen discipline. Under the guidance of both faculty and workplace supervisors, students will work in an organization as interns and complete work assignments that are primarily related to the students' discipline. The internship assignment is expected to take up no less than 150 hours to complete plus 12 hours of lecture at the College, and it may or may not be paid for. Students will be assisted by UIC, but they are responsible to find appropriate internship placements. The host organization will nominate a contact person for the student for the duration of the internship.

ACCT4073 ACCOUNTING INFORMATION SYSTEMS

(3 units)

Pre-requisite(s): ACCT2013/ACCT2053 PRINCIPLES OF ACCOUNTING II

Course Description: (For non-ACCT students.) The objective of this course is to provide students with an in-depth study of the application of information systems knowledge to the accounting environment. The course covers the processing of accounting data in computer environment; designing business processes and representing them with documentation tools; and the controls that are necessary to assure accuracy and reliability of the data processed by the accounting system.

ACCT4083 FRONTIERS OF ACCOUNTING DIGITALIZATION AND AUTOMATION

(3 units)

Pre-requisite(s): ACCT3003 COST AND MANAGEMENT ACCOUNTING I, and
ACCT4003 AUDITING I, and
ACCT3043 INTERMEDIATE ACCOUNTING II

Course Description: Accounting digitalization and automation aim to integrate artificial intelligence (A), blockchain (B), cloud computation (C), and big data management (D) to provide a digital and automated accounting working environment. This course is about introducing ABCD concepts and knowledge about digitization and automation to enrich accounting students' understanding of the leading technologies that are prevalent in today's data-driven world. An introduction is also given to relevant ABCD technologies that the accountant must know and be able to use to support accounting digitalization and automation functions.

AI1003 PYTHON PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with basic knowledge of Python Programming language, based on which computer-oriented problem modelling and solving skills can be developed. Students will learn about basic concepts of computer Programming and how to write elegant Python Programmes. Specific topics will include data types, control flows, data structures, functions, and the mechanics of running, testing, and debugging. After learning this course, students will be able to solve problems, explore real-world Programming development challenges, and create small yet practical python applications.

AI1013 OBJECT-ORIENTED PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces object-oriented Programming concepts, principles, and techniques, including classes, objects, inheritance, and polymorphism. All concepts are illustrated via a contemporary object-oriented Programming language.

AI1023 DATABASE MANAGEMENT SYSTEMS

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING or
COMP1013 STRUCTURED PROGRAMMING or
STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or
COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: This course provides how to represent the data in a database for a given application and how to manage and use a database management system. Topics include: conceptual modelling of a database, relational data model, relational algebra, database language SQL, relation database design, and emerging XML data model. In addition, hands-on DBMS experience is included.

AI1033 INTRODUCTION TO COMPUTER SYSTEMS

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the most fundamental concepts in computer hardware and software. It aims to facilitate students to learn how modern electronic computers work. In order to understand how computers work we gradually examine a series of layers from bottom up, each one built on the layer beneath. We start with looking at how data can be represented in binary and how computers can be modelled as hypothetical models such as universal Turing machines, then see how we can make machines which can transform that data using simple digital circuits, which are made of a collections of logic gates. Once we can control those circuits with instructions, we have the basis for Programming languages. The course extends further to cover the basics of operating systems.

AI2003 DATA STRUCTURES AND ALGORITHM ANALYSIS

(3 units)

Pre-requisite(s): AI1013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course aims to develop the students' knowledge in data structures and the associated algorithms. This course introduces the concepts and techniques of structuring and operating on abstract data types, commonly used algorithms, classic techniques to design algorithms, and efficiency of algorithms.

AI2013 INTRODUCTION TO ARTIFICIAL INTELLIGENCE

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING

Course Description: This course is designed for students seeking a broad understanding of Artificial Intelligence. This introductory course provides a broad overview of modern artificial intelligence. The students will learn how machines can engage in problem solving, reasoning, learning, and interaction. The students will design, test and implement algorithms. The students will also gain an appreciation of this dynamic field.

AI2023 ARTIFICIAL INTELLIGENCE WORKSHOP

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING

Course Description: As an integration of the AI2013 Introduction to Artificial Intelligence course which focuses on the basic concepts and knowledge of AI with the basic Python programming skill learnt in AI1003 Python Programming, this AI workshop will focus on how various key AI technologies work for the implementation of AI applications using Python, which include: Machine Learning (ML), Logic Programming (LP), Deep Learning (DL), Natural Language Processing (NLP), Computer Vision (CV), etc.

AI2033 PROBABILITY AND STATISTICS

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I or
MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING or
MATH1103 CALCULUS

Course Description: The focus of this course is the basic knowledge of the rigorous frame of the probability theory and the objective is to introduce the mathematical foundation of many basic statistical concepts and methods to the students.

AI2043 OPERATING SYSTEMS

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING or COMP1013 STRUCTURED PROGRAMMING or AI1013 OBJECT-ORIENTED PROGRAMMING or STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: This course aims to provide the fundamentals and major concepts of design and principles for operating systems. Topics include an overview of the basic components of an operating system, mutual exclusion and synchronisation, deadlocks and starvation, implementation of processes and threads, resources scheduling algorithms, memory management, and file systems.

AI2053 INTRODUCTION TO COGNITIVE SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: The course aims to present a multidisciplinary forum and expose students to contemporary understanding on how mental processes such as visual perceptions, memories, attentions, languages and thoughts are implemented in our living brain, paving the way for their future creative work and research in the field of artificial intelligence.

AI2063 GAME THEORY

(3 units)

Pre-requisite(s): None

Course Description: This course is a survey of the introductory concepts and techniques of game-theoretic analysis and their applications. It offers a non-technical exposure to game theory with a special emphasis on examples and applications drawn from science，economics, political and other fields in social sciences. As such, the course focuses on the identification and analysis of archetypal strategic situations frequently encountered in real-life experiences.

AI2073 PERCEPTION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to illustrate lawful relations between perceptual experiences and the physical world and to develop models of the processes and mechanisms that produce these connections. We will discuss fundamental problems in perception and learn how the latest technology allows us to measure the brain's responses to various sensory stimuli, and how conscious effort and experience can affect these responses.

AI3003 NEURAL NETWORKS AND DEEP LEARNING

(3 units)

Pre-requisite(s): AI1023 DATABASE MANAGEMENT SYSTEMS or DS2003 FUNDAMENTALS OF DATABASE SYSTEMS

Course Description: This course teaches students the basic concepts and theories in deep learning， some state-of-the-art algorithm, codes and tools in a variety of computer languages, and teaches students how to apply deep learning to real world problems.

AI3013 MACHINE LEARNING

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING or AI1013 OBJECT-ORIENTED PROGRAMMING or COMP1013 STRUCTURED PROGRAMMING or COMP3153 C++ PROGRAMMING LANGUAGE or STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS)

Course Description: The course will provide an introduction to Machine Learning and its core models and algorithms. The aim of the course is to give the student the basic ideas and intuition behind modern machine learning methods as well as a bit more formal understanding of how, why, and when they work.

AI3023 MACHINE LEARNING WORKSHOP

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING

Course Description: The aim of the course is to introduce a cloud-based service for creating and managing machine learning solutions. It’s designed to help students to leverage their existing data processing and model development skills & frameworks.

AI3033 INTRODUCTION TO ROBOTICS

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or COMP2003 DATA STRUCTURES AND ALGORITHMS or AI2003 DATA STRUCTURES AND ALGORITHM ANALYSIS

Course Description: This course aims to introduce students to the concepts involved with autonomous robotic systems. The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots.

AI3043 BAYESIAN NETWORKS

(3 units)

Pre-requisite(s): AI2033 PROBABILITY AND STATISTICS, and AI2003 DATA STRUCTURES AND ALGORITHM ANALYSIS or COMP2003 DATA STRUCTURES AND ALGORITHMS

Course Description: Bayesian networks, also called belief networks or Bayes nets, are probabilistic graphical models for representing knowledge about an uncertain domain. This course aims to facilitate the students to develop the knowledge and skills necessary to effectively design, implement and apply Bayesian networks to solve real problems. The course will cover (a) Bayesian networks representations; (b) exact and approximate inference methods; (c) estimation of both the parameters and structure of graphical models. Students entering the class should have good Programming skills and knowledge of algorithms. Undergraduate-level knowledge of probability and statistics is required.

AI3053 INTELLIGENT AGENT TECHNOLOGY

(3 units)

Pre-requisite(s): None

Course Description: The focus of this course is to provide the basic concept and knowledge of Intelligent Agent Technology (IAT) and how such cutting-edge technology can be applied and adopted in our daily life and works. It teaches students the basic concept and theories of Intelligent Agent Technology (IAT); the core AI enabling technologies for the support of IAT; the major intelligent agents and mobile agent applications; and the design and development of intelligent agent and mobile agent applications with the adoption of Java Agent Development Environment (JADE).

AI3063 NEUROSCIENCE IN ARTIFICIAL INTELLIGENCE

(3 units)

Pre-requisite(s): None

Course Description: The primary objective of this course is to exposes the students to the neural processes, biological substrates and cognitive functions of the human brain, as well as up-to-date neural methods in the neuroscience including brain imaging, electrical measurement and stimulation of the brain, and eye-tracking techniques. The course will also introduce computational algorithms to examine and/or simulate simple neurocognition. Students will develop an advanced understanding of the biological bases of neural network, paving the way for their future creative work and research in the field of artificial intelligence.

AI3073 INTRODUCTION TO BIOINFORMATICS

(3 units)

Pre-requisite(s): None

Course Description: The course is designed to introduce the most important and basic concepts, methods, and tools used in Bioinformatics which includes an introduction to Bioinformatics, experience with select bioinformatics tools and databases currently utilized in the life sciences.

AI3093 DECISION THEORY

(3 units)

Pre-requisite(s): AI2033 PROBABILITY AND STATISTICS

Course Description: Decision theory studies the logic and the mathematical properties of decision making under uncertainty. Statistical decision theory focuses on the investigation of decision making when uncertainty can be reduced by information acquired through experimentation. This course is a survey of the introductory concepts and techniques of decision theory and their applications from a statistical perspective. The objective is to introduce many basic concepts and methods of decision making to the students.

AI3103 REGRESSION ANALYSIS

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA or
MATH1063 LINEAR ALGEBRA II

Course Description: This course is designed to introduce theory of regression analysis and techniques which have been used in data analysis; to emphasise recent developments in the regression analysis such as statistical diagnostics and nonlinear regression, and motivate students to analyse multivariate data with the help of statistical packages such as MATLAB, R or SPSS.

AI3113 SPEECH PROCESSING AND RECOGNITION

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA, and
AI2033 PROBABILITY AND STATISTICS

Course Description: This course introduces fundamentals of speech processing in both time domain and frequency domain, speech production and mechanics, characteristic parameters of speech, vector quantization techniques, hidden Markov models, and neural networks applied to speech coding, speech synthesis, statistical speech recognition, and speech enhancement.

AI3123 DIGITAL IMAGE PROCESSING

(3 units)

Pre-requisite(s): MATH 1003 LINEAR ALGEBRA, and
AI2033 PROBABILITY AND STATISTICS

Course Description: This course provides fundamentals of digital images processing including basic image operations in both spatial and frequency domains, image restoration, morphological image processing, image segmentation and applications, human visual system and colour image processing.

AI3133 NATURAL LANGUAGE PROCESSING

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING or
COMP1013 STRUCTURED PROGRAMMING
or
COMP1023 FOUNDATIONS OF C
PROGRAMMING or
STAT2043 STRUCTURED PROGRAMMING
(FOR STAT STUDENTS) or
COMP3153 C++ PROGRAMMING
LANGUAGE

Course Description: The objective of this course is to provide NLP basic concepts and knowledge to students, together with a 14-hour 7 step-by-step NLP workshops with hand-on practice on various core Python-based NLP tools include: NLTK, spaCy, Tensor-Flow Keras, Transformer and BERT Technology to build NLP applications.

AI3143 COMPUTER VISION

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA, and
AI2003 DATA STRUCTURES AND
ALGORITHM ANALYSIS or
COMP2003 DATA STRUCTURES AND
ALGORITHMS

Course Description: This course covers basic concepts in computer vision and pattern recognition. Topics include image sensing and camera perception, 2D image analysis such as filters, edge detection and Hough transform, pattern classification, physics-based vision, stereo and motion, and solid model recognition. It concludes with current trends and challenges in computer vision and pattern recognition. Students will learn the essential mathematical foundation and algorithms of computer vision, and the methods of implementing these algorithms. Students will also gain practical experience on these topics by using Matlab or Python.

AI3153 HUMAN-COMPUTER INTERACTION

(3 units)

Pre-requisite(s): None

Course Description: In this course, students are introduced to the

fundamental theories and concepts of human-computer interaction (HCI). Students will gain theoretical knowledge of and practical experience in the fundamental aspects of human perception, cognition, and learning as relates to the design, implementation, and evaluation of interfaces. In addition to lectures, students will work on individual and team assignments to design, implement, and evaluate various interactive systems and user interfaces based on knowledge culled from class material and additional research.

AI3163 COMPUTER ARCHITECTURE AND OPERATING SYSTEMS

(3 units)

Pre-requisite(s): AI1003 PYTHON PROGRAMMING or DS1013 PYTHON PROGRAMMING FOR BEGINNERS or COMP1023 FOUNDATIONS OF C PROGRAMMING or AI1013 OBJECT-ORIENTED PROGRAMMING or COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course introduces the fundamental concepts and principles of computer organization and operating systems. Students will learn about the internal structure of computer systems, including the CPU, memory hierarchy, I/O subsystem, storage systems, and GPU architectures. Additionally, the course covers the basic functionalities and components of operating systems, including process management, memory management, file systems, and device management.

AI4003 OPTIMIZATION FOR MACHINE LEARNING

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I or MATH1003 LINEAR ALGEBRA, and MATH1103 CALCULUS or MATH1073 CALCULUS I or MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

Course Description: This course is an undergraduate-level course in introduction to optimization for machine learning. The course will provide fundamental knowledge and modern approaches in optimization which are required for beginners in machine learning applications. Introduction to convex optimization models, rate of convergence, gradient descent, the Newton Method, coordinate descent, the Penalty-Based and Primal-Dual Methods will be discussed in the course.

AI4004 FINAL YEAR PROJECT I (AI)

(3 units)

Pre-requisite(s): None

Course Description: This course aims to enable students to demonstrate an integrated understanding of AI algorithms systems principles and techniques through solving real-life problems; gain practical experience of developing and applying enabling technologies, and acquire independent problem solving skills as well as oral and written communication skills.

AI4005 FINAL YEAR PROJECT II (AI)

(3 units)

Pre-requisite(s): AI4004 FINAL YEAR PROJECT I (AI)

Course Description: This course aims to enable students to demonstrate an integrated understanding of AI algorithms systems principles and techniques through solving real-life problems; gain practical experience of developing and applying enabling technologies, and acquire independent problem solving skills as well as oral and written communication skills.

AI4013 KNOWLEDGE GRAPH ENGINEERING

(3 units)

Pre-requisite(s): None

Course Description: The focus of this course will be on basic semantic technologies including the principles of knowledge representation and symbolic AI. This includes information encoding via RDF triples, knowledge representation via ontologies with OWL, efficiently querying knowledge graphs via SPARQL, latent representation of knowledge in vector space, as well as knowledge graph applications in innovative AI systems such as semantic and exploratory search engines.

AI4023 DEEP REINFORCEMENT LEARNING

(3 units)

Pre-requisite(s): AI3013 MACHINE LEARNING or DS4023 MACHINE LEARNING

Course Description: The course will provide an introduction to reinforcement learning and its core models and algorithms. Reinforcement learning is a computational approach to learning whereby an agent tries to maximize the total amount of reward it receives while interacting with a complex and uncertain environment. The aim of the course is to give the student the basic ideas and intuition behind modern reinforcement learning methods as well as a bit more formal understanding of how, why, and when they work. Recent progress for deep reinforcement learning and its applications will be discussed.

AI4033 LARGE-SCALE DISTRIBUTED MULTI-AGENT SYSTEMS

(3 units)

Pre-requisite(s): AI3053 INTELLIGENT AGENT TECHNOLOGY

Course Description: This course teaches students the concept and theories of Large-Scale Multi-Agent Systems (LSMAS); the core technologies for the support of LSMAS; the state-of-art LSMAS applications; and the design and development of LSMAS with the adoption of Java Agent Development Environment (JADE) / JaCaMo.

AI4053 FINTECH

(3 units)

Pre-requisite(s): None

Course Description: This course teaches students the basic theory of Fintech and its underlying technologies including: Basic Cryptography, Cryptocurrency, Blockchain Technology, Digital Ledgers, Robo Advisor, etc. It also teaches students the usage of contemporary Fintech development tools, real-time intelligent financial system development tools, and software packages, and how to apply Fintech and related technologies to develop intelligent financial and banking systems.

AI4063 PATTERN RECOGNITION

(3 units)

Pre-requisite(s): MATH 1003 LINEAR ALGEBRA, and
AI2033 PROBABILITY AND STATISTICS

Course Description: This course aims to equip students with knowledge and skills to design machines or classifiers than can extract features and recognize patterns - understanding the basic science, arts, algorithms, and technologies of pattern recognition. The course focuses on mapping various real world problems into pattern recognition frameworks, studying statistical pattern recognition approaches, and experimenting with real world problems to appreciate the methodologies of pattern analytics.

AI4083 MULTIMEDIA MINING AND ANALYTICS

(3 units)

Pre-requisite(s): MATH 1003 LINEAR ALGEBRA, and
AI2033 PROBABILITY AND STATISTICS, and
AI3123 DIGITAL IMAGE PROCESSING

Course Description: This course will introduce concepts and tasks of multimedia data mining, algorithms, modelling, search evaluation, and applications of multimedia data mining and analytics in our daily life including web context extraction, content based image search for cloth recommendation, video feature mining, video retrieval, multimodal fusion, sentiment analysis and mining popular routes from social media, in-house multimedia mining, biometric multimedia data processing, detection of demographics and identity in speech and writing, etc.

AI4093 DESIGN AND IMPLEMENTATION OF INTELLIGENT VISION SYSTEM

(3 units)

Pre-requisite(s): AI3143 COMPUTER VISION, and
AI4063 PATTERN RECOGNITION

Course Description: This course covers concepts in design and implementation of intelligent vision systems. Topics include hardware and software structure of intelligent vision systems, principles of intelligent vision systems. By exploring the current popular vision systems, such as distributed surveillance video systems, self-driving vision systems, industrial vision inspection systems, robot arm vision systems, students will learn the essential theories and practices of intelligent vision systems. This course will also conclude with current trends and challenges in design the intelligent vision systems.

AIM2003 FUNDAMENTALS OF COMPUTER GRAPHICS

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide an outstanding and comprehensive introduction to basic computer graphic technology and theory. It offers the essential information for understanding how images get onto the screen by using the complementary approaches of rasterization and ray tracing. The teaching mode is based on weekly lectures, which cover topics common to an introductory course, such as texture mapping, data structures for graphics, visual perception and computer animation.

AIM2013 VISUAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: The course is designed at directing students in Visual Communication. It also deals with the study of the different visual communication strategies in traditional and new media. Students will have the tools to understand the complex world of Visual communication and how to ensure that communication through images reaches the recipient in the shortest possible time and reaches its maximum communicative power.

AIM2023 SCRIPTWRITING FOR ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with knowledge of script writing for animation with creativity. In particular, attention is paid to the goals and practice of writing for television and film, storytelling through cinematic techniques, creative writing for animation, effective narrative scripts, including character development, story, tension, and suspense in the proper script format, and the suitability of scripts for animation.

AIM2033 FUNDAMENTALS OF DIGITAL ILLUSTRATION

(3 units)

Pre-requisite(s): None

Course Description: Aiming to build foundation in illustration arts with computer graphic technology, creative methodology, and theory, this course offers students a broad range of introductory concepts and skills in this 2D medium. By the end of this study, students synthesise core theoretical concepts, dexterity and tacit proficiency by creating digital visual media. Students will effectively apply fundamental principles to digital tools in creating impressive visuals that communicate stories and ideas for illustration, animation, games and publishing. The teaching mode includes lectures, discussions and practical exercises which cover topics such as language of 2D design, composition for time-based media, colour theory, graphic studies, and visual perception.

AIM2043 FUNDAMENTALS OF DIGITAL DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This comprehensive 14-week course is designed to introduce students to the creative world of Adobe software and equip them with the essential skills needed to excel in the field of multimedia creation. Students will gain hands-on experience with five industry-standard applications: Photoshop, Illustrator, Premiere Pro, After Effects, and Audition, which correspond to raster graphics, vector graphics, video editing, VFX & animation, and audio editing. Throughout the course, students will learn to create and manipulate 2D graphics, edit videos, design motion graphics, and manipulate audio. This course encourages creativity and experimentation while providing a solid foundation in the technical aspects of modern media creation pipeline.

AIM2053 PROGRAMMING FUNDAMENTALS FOR INTERACTIVE MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the foundational concepts of programming, equipping them with essential skills for modelling and solving computational problems. Students will learn core programming principles, including data types, control flows, data structures, functions, and essential

techniques for running, testing, and debugging code. Emphasis will be placed on writing clear, efficient programs to tackle real-world development challenges and create practical applications. Additionally, this course lays a strong foundation for students specializing in animation and interactive media program, preparing them for more advanced studies in their field. Upon completion, students will be equipped to solve complex problems and build upon their programming knowledge in future courses.

AIM3003 CHARACTER ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the principles and techniques in developing character animations for narrative purposes. Unlike motion graphics and effects animations, character animation demands the capability of relating the characters with the audience for effective communication of messages. This can only be achieved with fluid animations, vivid characters' personalities, facial expressions, body language to enrich the communicative power of character animation with non-verbal bodily animation covered in this course. This course will start with the classical Disney animation principles and demonstrate how to apply these in various scenarios to deliver the sense of weight and convincing physical movements. Students will then learn and master the art of timing and spacing in order to express emotions in the form of animations. This course will also cover animation principles and specialized studies on lip synchronization, facial expression, facial anatomy, eyeballs and eyebrows controls, head movement and tilt direction, body movement and action with blocking, timing, and details on secondary motion. Students can develop characters for performance and storytelling applications in animation, film, TV and games.

AIM3013 SCENERY DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the principles and techniques in developing 2D and 3D scene related to the character, story setting, stage setting or game setting that can be applied to screen. It demands the capability of relating to style, line, shape, form, mass, space, value, colors, texture, proportion with characters, scale, measure, position, balance, style, mood, atmosphere and principles of composition, unity, harmony, contrast, variety, emphasis, rhythm for effective communication of messages through digital painting, polygon construction, etc.

AIM3023 INTERACTIVE GRAPHICS

(3 units)

Pre-requisite(s): None

Course Description: In the world of technological expansion, new forms of dynamic interactive media are constantly emerging. With this course students will broaden their understanding of 2D and 3D digital media with the applications of their creative ideas in interactive media that aims to extend their skills in animation, 3D design, motion graphics and game design. In this course, students will learn the design language of interactivity, and ways to communicate their creative ideas with programmable design elements. With the introduction of practical skills in creative coding, students will transform their concepts from static medium to dynamic interactive media, such as generative design, immersive simulation and interactive animation, among others. By exploring computer programming through a variety of media, students will develop fundamental problem solving, design, and technical skills for game design, motion graphics, interactive visualization and immersive cinematics. With the introduction to computer programming basics, students will learn efficient and effective ways to manipulate, create and transform visual elements using computer code, directly applicable to creative industries and emerging dynamic media. After finishing this course, students will be able to develop dynamic and generative visual applications for various domains of creative and media productions.

AIM3033 INTERACTIVE MEDIA WORKSHOP

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the terminology and tools used in the interactive media environments, and will allow students to actively use the new skills in a series of discussions, quizzes, and labs. This course will enable students to become fearless learners of new technologies in today's knowledge, and teach them to be comfortable working in contemporary the interactive media organizations.

AIM3043 3D MODELLING

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to introduce students to a variety of techniques used in creation of innovative 3D designs from concept to completion, applicable to their further studies in game design, as well as in 3D digital visualisation, 3D animation, film, and motion graphics, among other types of multimedia.

AIM3053 MULTIMEDIA STORYTELLING

(3 units)

Pre-requisite(s): None

Course Description: This course will examine and compare a variety of media narrative patterns. Students will explore creative storytelling possibilities of different media, such as Music Videos, Experimental Film, Animation and Video Games. They will investigate different narrative traditions such as Myths, Opera, Theater and Dance, in search of semiotic patterns that transcend form, and they will study various forms of multimedia that are employed in the industry. In the end, they will deepen their reservoir of cultural references and increase their effectiveness in developing and presenting creative concepts for a range of media formats.

AIM3063 3D ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course explores the world of 3D computer animation from initial concepts to final production. It introduces the language, principles, aesthetics and 3D tools used in the creation of animation within the context of art and design. Emphasis will be placed on developing a working knowledge of the mechanics of 3D animation. By completion of the course, students will become acquainted with the necessary skills sufficient to produce projects of merit..

AIM3073 ANIMATION SOUND DESIGN AND MIXING

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to train students in the foundational practices, basic elements and stages of audio production, and the concepts, skills and techniques of audio equipment and systems involved in games, film and/or video production processes particularly as relates to animation. During the course, demonstrations, equipment tutorials, hands-on workshops, in-class exercises and projects will be used to enhance student learning and acquisition of experience in sound design, production and mixing for animation in the games, film and television industries.

AIM3083 2D COMPUTER ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims at widening students' horizons in understanding animation. It offers an opportunity for students to experiment with different styles and techniques of animation such as painting, cut-out, stop-motion, puppet model and other haptic techniques without using the conventional key framing approach. It will also review photographic methods and show how digital media can augment traditional methods or replace them. Through individual and group assignments students will explore various tools and techniques while developing their skills of styles, concepts and have better understanding of the possibilities of animation.

AIM3093 DIGITAL CULTURES AND VISUAL THINKING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to acquaint students with the connecting cultures through the interdisciplinary knowledge of the building blocks of visual thinking and cultures play. It also engages students with the increasing significance of storytelling skills in digital and interactive environments. Students will able to demonstrate their knowledge of digital literacy, media literacy and literature proficiency solving the commercial and cultural driven presentation for traditional media, social media and new media environment. Student will explore multicultural style of visual thinking presentation in teamwork and individual fit the purposes. Upon completion of the course, student will present a visual thinking presentation for a self-selected topic aligned with the key theme of the requirements. The assignments of this course are designed in applying the student-centered exploration presentation approach.

AIM3103 JAPANESE ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introduction to Japanese animated films and TV programmes. We will discuss the major animation programmes, the different genres and the social influence of animation; analyse the production of the animation programmes; investigate the development of Japanese animation market as well as the exports of the animation cultural products to the world. It is designed to give students an understanding of the overall picture of the animation industry, the audience (including the fans), and the anime-related popular culture. This course will also guide students through theories of animation and media art to gain a more in-depth understand of Japanese animation.

AIM3113 CHARACTER DESIGN AND STORYBOARD MAKING

(3 units)

Pre-requisite(s): AIM3083 2D COMPUTER ANIMATION

Course Description: This course aims to equip students with the principles and skills needed to develop engaging characters to drive animation story with dramatic and emotional impact. The course will focus on the biped character creation process and the application of storyboarding principles in the form of animatic to reflect the complexity of characters' personalities in animation. Students will learn the visual aspects of character design covering facial features, body proportion, anatomical structure, posing, and custom styles and evolve the creative decisions based on the research and development of the characters' profiles and personalities. In addition to the conceptual and visual development, students will model, rig and texture the characters to produce an animatic with the applications of storyboarding principles. By the end of the course, students will be able to develop original characters and present their stories vividly in the form of animated storyboard.

AIM3123 INTERACTIVE VIDEO PRODUCTION

(3 units)

Pre-requisite(s): None

Course Description: This course prepares students for the production of Interactive Video (IV), facing the challenges that linear video is not able to adequately cover today. Students will have a basic knowledge of converting linear videos into interactive using tools, equipment and software to create interacting videos, in particular lectures will focus on engaging, immersive video experiences, gamified, on 360 videos, VR video and linear.

AIM3133 HISTORY OF ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to introduce students to the history of animation by surveying a comprehensive range of key artists, styles, techniques, and genres—from the 1900s to the present. Students will study a global range of animation by both commercial and non-commercial artists, analysing work designed for the cinema, television, art gallery, and internet. We will consider issues of form, medium, technical method, and national context, and students will learn to situate animation within its social, aesthetic, and technological milieu. Throughout the course students will examine the interrelation of industrial and independent artistic modes of animation, and they will learn to think critically about animated representations of race and ethnicity, nationality and gender. Finally, the course will consider contemporary animation and the increasing entanglement of animation and cinema within the digital context.

AIM3143 SPECIAL TOPICS IN ANIMATION AND INTERACTIVE MEDIA SUBJECTS

(3 units)

Pre-requisite(s): None

Course Description: Different subjects are designed to give

students a range of current ideas and respond to new interests of the faculty. Some topics include: digital technology and innovation, smart phone app, virtual reality, augmented reality, computer-generated images, etc.

AIM3153 GAME ART AND ANIMATION

(3 units)

Pre-requisite(s): AIM3043 3D MODELLING

Course Description: At the core of each video game, there is an intensely creative artistic vision and engaging, interactive visual elements that continuously expand the definition of game art. In this course, game art & animation focuses on the design of modular environments, texturing, 3D animations of characters and props that students learn to create in modelling and game development software and tools. The students acquire complex technical skills while developing their unique artistic vision through a progressive series of practical assignments while mastering the fundamentals of 3D animation, lighting, texturing, and rendering within industry-recognized game engines. In addition to learning effective technical workflows, the students will synthesize their understanding of the artistic principles at the core of 3D video games art, including 3D design, knowledge of colour, lighting, shading, anatomy, motion, perspective, and polygonal modelling.

AIM3163 ADVANCED DIGITAL ILLUSTRATION

(3 units)

Pre-requisite(s): AIM2033 FUNDAMENTALS OF DIGITAL ILLUSTRATION

Course Description: The course aims to provide students with advanced knowledge and professional painting and rendering skills required for creating digital illustrations. Additionally, students will enhance their artistic knowledge in color theory, composition skills, and concept-generating skills, which are essential for creating successful illustrations.

AIM3173 MOBILE MEDIA GAME DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: The mobile game industry has been rapidly growing due to the increased popularity of smart phones and tablet PCs. As a result, mobile games have become the main game type in the industry. To help students gain experience and skills in mobile game development, we offer a course that covers fundamental techniques and skills. This course is designed to introduce students to game programming and design, with an emphasis on game engine fundamentals, programming, game theory, and 2D interactive experiences. Throughout the course, students will learn about the professional process of mobile game development and develop a 2D game using an iterative process. They will use both creative ideas and technical skills to implement the game. The course emphasizes the appropriate use of technology.

AIM3183 VIRTUAL REALITY ART

(3 units)

Pre-requisite(s): None

Course Description: This class offers students a framework for creating compelling environments in VR with special considerations for artistic, design, experimental, and technical trends. The students' practical projects will reflect their new knowledge of historical, present, and emerging VR platforms. In this course, students will learn the process of developing their ideas and content for immersive environments and applications with the understanding of their audiences, interactivity, and affordances of current technology. Specifically, students will learn to create interactive scenes within a gaming engine using VR-appropriate 2D, 3D, audio assets, programming interactions, and multisensory responses.

AIM3193 GENERATIVE AI WORKFLOW FOR MEDIA

(3 units)

Pre-requisite(s): None

Course Description: Generative AI for Media provides a framework for understanding how to employ workflows for creative outputs while integrating them into production pipelines. It explores the value and impact of AI technologies within the media production lifecycle and establishes practical methods for content generation and enhancement. The course introduces installation, configuration, and techniques such as the use of web-based interfaces that connect to local generative AI models and user interfaces presenting nodes and graphs. Students will also explore the creative aspects of generative AI, enabling them to push the boundaries of traditional media and engage with digital content in innovative ways.

AIM4003 PRODUCTION METHODS

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to serve as an introduction to basic concepts of photography film, video, audio, motion graphics, animation, and interactive media production. Students will develop their fundamental knowledge of production from capture great video images and audio, and to be able to select the copyrighted materials for experimental, cultural and commercial storytelling. It also facilitates students to explore the communication theory and technologies in the context of professional practice (the pre-production planning, production and post-post-production operation). Upon completion of the course, students will present their creative production through the selected channels.

AIM4023 INTERACTIVE MEDIA ARTS: ORIGINS TO THE PRESENT

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the history and theory of interactive media art, covering a range of precursors—from the nineteenth century to the present. Following a chronological structure, the course begins by examining the interactive qualities of pre-cinematic devices, and early interactive experiments by modernist artists—from Brecht to Futurism, Dadaism, and Constructivism. It then traces the development of interactivity within an interdisciplinary range of postwar media art—including cybernetics, video art, happenings, expanded cinema, and installation art. Finally, we analyse contemporary examples of interactive artworks – including net art, gaming, robotic art, relational aesthetics, and VR. Students will be introduced to theories of the interface and interactivity, telepresence, networks, social sculpture, embodiment, and performativity. Through class discussion, group exercises, and written assignments, students will apply their theoretical and historical knowledge to the analysis of key moments within the history of interactive media art. Course

screenings will include video art, kinetic and interactive art, televisual art, expanded cinema, video art, and net art. Course readings will draw from key texts on film and media theory, new media studies, media archeology, art history, media philosophy, and artists' writings.

AIM4033 FINAL YEAR PROJECT I (AIM)

(3 units)

Pre-requisite(s): AIM3113 CHARACTER DESIGN AND STORYBOARD MAKING (for animation project) or CTV2033 COMMUNICATION RESEARCH METHODS (for dissertation) or AIM3123 INTERACTIVE VIDEO PRODUCTION (for interactive media project)

Course Description: The final year project is formed in three directions: Dissertation; Animation Project; and Interactive Media Project. For the stage of Final Year Project I, all students are required to select their projects and for assignment of supervisors. In the case of dissertation, student will be required to develop a research proposal outline, which is to demonstrate the research question(s) and approach to completing the dissertation. In the case of animation and interactive media project, student will undertake an individual project to develop and produce either an animation or an interactive media project. All students will be expected to complete 50% of the total work of the final year project.

AIM4043 FINAL YEAR PROJECT II (AIM)

(3 units)

Pre-requisite(s): AIM3113 CHARACTER DESIGN AND STORYBOARD MAKING (for animation project) or CTV2033 COMMUNICATION RESEARCH METHODS (for dissertation) or AIM3123 INTERACTIVE VIDEO PRODUCTION (for interactive media project)

Course Description: The course of Final Year Project II (AIM) engages the student in supervised independent research or project work. It is the second and final stage of the completion of the final year project.

AIM4053 ADVANCED INTERACTIVE MEDIA WORKSHOP

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the terminology and tools used in the interactive media environments, and will allow students to actively use the new skills in a series of discussions, quizzes, and labs. This course will enable students to become fearless learners of new technologies in today's knowledge, and teach them to be comfortable working in contemporary the interactive media organizations.

AIM4063 STOP-MOTION ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: Stop-Motion Animation is a form of comprehensive art, which is a technique used in animation to bring static objects to life on screen. It has a long history and still plays an important role in the development of animation. This course focuses on a variety of tools and skills needed to create stop-motion animation. Learning will be emphasized through studio projects designed to teach the principles of timing and motion.

AIM4073 VIRTUAL AND AUGMENTED REALITY ART

(3 units)

Pre-requisite(s): AIM3043 3D MODELLING

Course Description: This course offers students a framework for creating compelling environments in VR and AR with special considerations for artistic, design, experimental, and technical trends. The students' practical projects will reflect their new knowledge of historical, present, and emerging VR, AR, and mixed reality platforms. In this course, students will learn the process of developing their ideas and content for immersive environments and applications with the understanding of their audiences, interactivity, and affordances of current technology. Specifically, students will learn to create interactive scenes within a gaming engine using VR- and AR-appropriate 2D, 3D, audio assets, programming interactions, and multisensory responses.

AIM4083 ANIMATION AND INTERACTIVE MEDIA INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: Objectives of the internship are to provide a direct link between the programme's core values and the disciplines and methods of practice; to enable students to experience aspects of practice and provide the opportunity for them to work in areas of the field outside their specific expertise; to enable students to observe, analyse, and comment on the interaction between theoretical and practical issues of their programme as it is practiced; and to establish connections between practice and the development of relevant directions.

AIM4093 SPECIAL TOPICS IN ANIMATION AND INTERACTIVE MEDIA STUDIES

(3 units)

Pre-requisite(s): None

Course Description: Different studies are designed to give students a range of current ideas and respond to new interests of the faculty. Some of the topics of the studies include: digital technology and innovation, smart phone app, virtual reality, augmented reality, computer-generated images, etc.

AIM4103 STUDIES IN OPERATION AND MANAGEMENT OF ANIMATION INDUSTRY

(3 units)

Pre-requisite(s): None

Course Description: This course provides a comprehensive look at the global animation businesses, from theatrical films to television to video-on-demand, and especially how they relate to animation content. It also explores how to finance, distribute and market animation to multiple platforms and ancillary businesses, including related strategies and plans. In addition, we will explore the role of the animation professional in these industries and how to initiate business strategies.

AIM4113 DIGITAL MEDIA PROJECT MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students the concepts of digital project management in strategic business and innovative environments. Students will explore the project management and strategic management in digital practice and team development from mini digital projects. The scope of projects will involve multicultural activities (products and services) which may support from latest business models for digital economy, creative economy and cultural economy. It also engages students to define the performance indicators of a successful project. Students will able to evaluate different stages of the project and report the project performance as a project manager. Upon completion of the course, student will present their projects management experience and innovative outcomes.

AIM4123 DIGITISING HERITAGE

(3 units)

Pre-requisite(s): None

Course Description: Digitising Heritage provides a theoretical framework from which cultural heritage, consisting of both tangible and intangible heritage is digitised. It looks at the value and impact of the use of digital technology within the cultural heritage domain, and provides a practical basis for documenting, recording and preserving cultural heritage using a suite of digital technologies such as close-range photogrammetry, 3D laser scanning, through to NERF (Neural Radiance Fields), creating real-time visualisation with processed 3D models for Virtual Reality and Augmented Reality (AR) applications.

AIM4133 AUGMENTED REALITY FOR INTERACTIVE MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the fundamental concepts and practical applications of augmented reality (AR) within interactive media. By the end of the course, students will: Understand how to integrate and program with external SDKs in Unity to create AR applications. Develop AR applications that run on both iOS and Android mobile devices. Build simple, interactive mobile applications that utilize AR technologies such as 2D and 3D marker recognition, GPS integration, and markerless tracking. Through a series of practical exercises, students will gain hands-on experience in creating AR projects, enhancing their ability to design and implement AR solutions. The course also aims to expose students to emerging AR technologies and trends, including SLAM and object recognition, helping them to develop innovative and functional AR experiences.

BA1003 DATABASE MANAGEMENT AND APPLICATIONS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to different types of database management systems (FBMS), the principles and processes of developing database applications using structured query language (SQL) in business operations, as well as the management of database environments. The course focuses on the fundamentals of data management in organizations and the establishment of concepts and implementation methods for FBMS applications. The course will also introduce the ideas of how to explore large, high-dimensional datasets through advanced techniques of big data analysis.

BA2003 ARTIFICIAL INTELLIGENCE AND DEEP LEARNING

(3 units)

Pre-requisite(s): None

Course Description: The aims of this course are: (1)To teach students the basic concepts and theories in AI and deep learning; (2)To teach students to apply AI and deep learning to real-world problems; (3)To teach students some state-of-the-art AI and Deep Learning algorithms, codes and tools in a variety of computer languages.

BA2013 DATA MINING WITH BIG DATA

(3 units)

Pre-requisite(s): None

Course Description: This course provides a comprehensive introduction to data mining and is designed to be accessible and useful to students. Areas covered include data pre-processing, predictive modeling, association analysis, cluster analysis, anomaly detection, and avoiding false discoveries. The goal is to present fundamental concepts and algorithms for each topic, thus providing students with the necessary background for the application of data mining to real problems.

BA2023 OPERATIONS RESEARCH

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a basic understanding of the principles, concepts, and applications of operations research. It introduces students how to use variables for formulating complex mathematical models in the business and management contexts, including the use of various software packages. The course contents include linear programming, transportation problem, assignment problem, inventory control, replacement theory, sequencing problem, queuing theory, and project planning and network analysis. Weekly case discussions, exercises and assignments, and group projects will be used to explore the topics and issues in this course. Lectures will focus on the introduction and explanation of key concepts in operations management. In addition to a final examination, class participation, case discussion and presentation, assignments, and a project will be arranged to stimulate students' interest and increase their awareness of the practical implications of the concepts delivered in the course.

BA2033 OPTIMIZATION METHODS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce the fundamental theory of optimization methods and algorithms developed for solving various types of optimization problems. The main purpose of this course is to foster and promote research interest in applying optimization techniques to solve real-life problems at a level that is mathematically appropriate and accurate.

BA2043 R LANGUAGE FOR STATISTICS

(3 units)

Pre-requisite(s): GFQR1023 DATA ANALYTICS FOR BUSINESS

Course Description: R is a language and environment for statistical computing and graphics. It is a free and open-source programming language often used as a data analysis and statistical software tool. The R environment consists of an integrated suite of software facilities designed for data manipulation, calculation, graphical display, and statistical simulation. This course will introduce R programming basics and apply them to various practical problems related to business applications. The course aims to provide students with practical tools in statistical analysis like estimation, hypothesis testing, regression, and correlation using the R programming language.

BA3013 CUSTOMER BEHAVIOURS AND PSYCHOLOGY

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: Major areas covered in this course are: consumer psychology factors influencing consumer behaviour such as demographics, personality, and lifestyles; behavioral variables like usage rates, usage occasion, loyalty; the consumer as an individual, consumers in their social and cultural settings, the consumer's decision-making process and developing relevant and effective marketing strategies for consumers.

BA3023 DATA ANALYSIS AND FINTECH FUNDAMENTALS

(3 units)

Pre-requisite(s): BA2003 ARTIFICIAL INTELLIGENCE AND DEEP LEARNING

Course Description: This course aims to provide an introduction to the interdisciplinary fields of data science, finance and digital economy. The content of this course aims at helping students to apply the knowledge and techniques of data analysis and machine learning to deal with the issues in capital markets. Also they will understand the new development in data science such as distributed and secure multi-party computation. The students will learn some of the digital economy's leading data models, such as searching engine, reputation, prediction, and recommender.

BA3033 DATA ANALYSIS IN NEW MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with a solid understanding of the principles, methods, and technologies for new media analytics. It places special emphasis on working through applications and examples of analytics in the real world, while offering an accessible overview on some of the fundamental techniques in digital media analytics. Particularly, this course uses analysis to craft experiences that profoundly reflect each online user's needs, expectations, and behaviors, measures real social media ROI (sales, leads, and customer satisfaction), implements advanced tools, processes, and algorithms for accurately measuring influence, and enables students to identify and understand most important audiences across the digital ecosystem.

BA3043 DATA VISUALIZATION

(3 units)

Pre-requisite(s): None

Course Description: This course shows how to better understand data, present clear evidence of findings to the intended audience, and tell engaging data stories all through data graphics. With its foundations rooted in statistics, psychology, and computer science, practitioners in almost every field use visualization to explore and present data using various types of graphics.

BA3053 ETHICAL ISSUES ON BUSINESS ANALYTICS

(3 units)

Pre-requisite(s): None

Course Description: The course contents introduced in this course partner the ethical with the technical and practical, with aims to give students the skills to conduct business analytics in a responsible way, including the ability to identify flaws and limitations in algorithms, anticipate legal or ethical controversies, prevent privacy violations and discrimination, and evaluate mechanisms for algorithmic accountability.

BA3063 GLOBAL OPERATIONS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a basic understanding of principles, concepts and applications of operations management in both manufacturing and service organisations. It emphasises how operations management function interacts with the other functional areas within an organisation and contributes to the overall betterment of society. Also, it imparts to students the principles, theories and tools of operations management at both strategic and tactical levels. It helps students develop their critical thinking and analytical skills. The course contents include the roles of operations management in the economy and organization, process management and analysis, quality management, capacity management, facility planning, demand management, inventory management, innovation, and sustainability in global operations management.

BA3073 MOBILE AND CLOUD COMPUTING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces an overview of the field of Mobile and Cloud Computing, its enabling technologies, the main building blocks of cloud computing systems, and their application. This course will cover the topics of cloud infrastructures, virtualization, software-defined networks and storage, cloud storage, and programming models. Also, hands-on experience through projects utilizing cloud infrastructures (provided by campus data centers or public cloud services) will be provided.

BA3083 MULTIPLE CRITERIA DECISION MAKING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with knowledge and tools for implementing multicriteria decision-making methods (MCDM) with quantitative methods. Accordingly, in order to help students understand how to make business decisions using ranking irregularities, ELECTRE methods,

the Analytic Hierarchy Process (AHP), and decision-making applications will be introduced to identify the variables and their suitability ratings for decisions. Students will be able to use multi-criteria decision-making techniques, partially or completely, to rank the alternatives and make decisions under conditions of uncertainty and risk.

BA3093 SIMULATION AND RISK ANALYSIS

(3 units)

Pre-requisite(s): GFQR1023 DATA ANALYTICS FOR BUSINESS, and
BA2043 R LANGUAGE FOR STATISTICS

Course Description: This course will show how to generate random (more precisely, pseudorandom) numbers and how these random numbers can be used to generate the values of random variables from arbitrary distributions due to uncertainty. It will also show how to use simulation to determine whether the stochastic model chosen is consistent with real-world data. Monte Carlo simulation and other computer simulation techniques in various discrete and continuous systems will be introduced. These simulation techniques will be used in combination with risk analysis. After completion of the course, students are expected to understand how to analyze a model by using a simulation, and to be able to model and simulate various practical systems in finance, insurance, and business applications. The course will also discuss and develop different models for quantifying risks, and address risk diversification using modern portfolio theories.

BA3103 STATISTICAL REASONING FOR BUSINESS DECISIONS

(3 units)

Pre-requisite(s): BA2043 R LANGUAGE FOR STATISTICS

Course Description: This course provides students with adequate knowledge on the principles and methods in statistical reasoning for making business decisions. It emphasizes on working through applications and examples of statistical methods and reasoning in the business world, while offering an accessible overview on the fundamental statistical techniques. The course contents include introduction to statistical reasoning, statistical measures of association and probability, statistical measures of distributions, inferential statistics, prescriptive analytics, and future trends, with an emphasis on their applications to sound business decisions. Students are expected to possess basic skills and knowledge in R Language before undertaking this course.

BA3113 SUPPLY CHAIN MANAGEMENT AND LOGISTICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a fundamental understanding of principles, concepts, and applications of global logistics and supply chain management in the business context. It equips students with the necessary skills and techniques for coping with logistics and supply chain challenges and problems in an ever-changing business environment. Also, this course helps students develop their abilities and knowledge in logistics and supply chain management, thereby preparing them for further studies, employment, and lifelong learning. The course contents include the roles of logistics and supply chains, shipping and transport management, inventory and warehousing management, procurement management, demand and order management, materials handling and storage, IT, logistics service providers, supply chain and logistics associations, as well as the role of sustainability in supply chain and logistics development.

BA3123 TEXT MINING IN BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: This course enables students to extract information from both structured and unstructured business data and also find patterns. This course aims to introduce text mining and the different ways this type of data mining can be used to find implicit knowledge related to business text collections. It provides the guidelines for implementing text mining systems, as well as concepts and approaches. The course starts by providing detailed text preprocessing techniques and then goes on to provide concepts, the techniques, the implementation, and the evaluation of text categorization. It then goes into more advanced topics with implications in business.

BA4003 BUSINESS ANALYSIS RESEARCH SEMINAR

(3 units)

Pre-requisite(s): None

Course Description: This seminar course emphasizes the introduction and discussions of the new topics in business analytics with the assistance of faculty experts. It aims to equip students in the Business Analytics programme with research literature and practical-oriented themes to enhance the abilities to conduct research, appreciate, and understand current business analytics knowledge development, and work towards individual competency and success.

BA4013 BUSINESS ANALYTICS INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The primary objective of this course is to provide students the opportunity to better understand the value-creation processes and to familiarize them with the work environments in data analytics by gaining real-life working experiences in a business organization. A secondary intention is for students to use the internship placement to explore their career interests and develop their career goals, as well as to broaden their perspectives in a cross-disciplinary way. Subsequently, the internship assignment will help students to accumulate valuable business analytics work experiences in preparation to launch a full-time career in business analytics or to pursue further academic studies globally upon graduation.

BA4023 DECISION BEHAVIOR, ANALYSIS, AND SUPPORT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to offer an accessible overview of business analytic tools for conducting risk, performance, and decision analysis that aim to solve business decision-making problems. Students are expected to learn fundamental concepts of these business analytics tools and how to utilize them to solve business decision-making problems. First, the course discusses the value and limitations of these business analytics tools for solving

business decision-making problems. Second, the course introduces the backgrounds and intuitions behind these business analytics tools. Lastly, the course provides lessons on applying major business analytics tools to solve business decision-making problems.

BA4033 KNOWLEDGE MANAGEMENT AND DIGITALIZATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide a thorough coverage of the latest theory and practice of Knowledge Management (KM), with an integrated interdisciplinary presentation that makes sense of the confusingly wide variety of computer science and business KM perspectives arising simultaneously from artificial intelligence, information systems, and organizational behavior. The course contents cover the "hard" technical components of computer tools and techniques for managing knowledge, without losing sight of the "soft" management needs and challenges in leveraging knowledge effectively within an organization. The focus will be on critically evaluates the nature, computer representation, access, and utilization of knowledge versus information within a human context. This course is an essential preparation for students to become managerial, technical, and systems workers alike in today's modern knowledge- based economy.

BA4043 SOCIAL MEDIA AND DIGITAL MARKETING

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: The course offers an overview of how marketing has (and has not) changed with the rapid rise of the Internet and social media. It will equip students with the relevant knowledge, perspectives, and practical skills required to develop marketing strategies that leverage the opportunities inherent in the Internet and social media. The course aims to provide students with an understanding of social media and digital marketing concepts and analytical processes. The focus is to foster and sustain students' skills as professional digital marketing analysts and problem solvers to plan and implement a successful digital marketing strategy.

BIOL1003 INTRODUCTION TO WORLD ECOLOGICAL PROBLEMS AND MAN

(3 units)

Pre-requisite(s): None

Course Description: This course aims to improve the awareness of students of major environmental issues concerning our daily life. Pressing environmental challenges reflecting the interaction between man and the environment as the basic model framework will be examined. Students will be introduced to a variety of ecological principles and apply them to: (1) local issues, such as waste management, coastal erosion, air and water pollution; (2) regional issues, such as shifting cultivation and urbanization; and (3) world issues, such as population growth, greenhouse effect, ozone depletion, global warming; and ultimately, (4) the importance of sustainable development. Lectures will be supplemented by discussions of articles, video viewing, and slides pertaining to pressing environmental issues.

BIOL1013 BIODIVERSITY AND THE EXTINCTION CRISIS

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to let students critically review the evidences, causes, and consequences of biodiversity extinction crisis as well as beware of the impacts of biodiversity loss on human sustainability contributions of environmental management on humanity's future will also be explained in interdisciplinary perspectives in this course. Through lecturing and experiential learning, as well as participating in group research projects, students will learn to appreciate the interdisciplinary approaches such as integrating variety of skills from science, social science and business subjects in solving the root problems of human sustainability so as to maintain human well-being in the present and future.

BIOL1023 DIVERSITY OF LIFE AND LABORATORY

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the vast and exciting field of biology through a series of active learning exercises, such as laboratory practical and field trips, with emphasis on comparative morphology, evolutionary design and ecological factors influencing changes in biodiversity over time and space.

BIOL2003 GENERAL BIOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course provides the student with a solid foundation in the principles of biology, from molecular biology to cells to the diversity of life. Topics include the structure and function of representative organisms, and their diversity. Latest advances in biology are incorporated into the course. There is also an overview of the scientific process/method, and examples are reviewed to show how the process works.

BIOL2013 GENERAL BIOLOGY AND CHEMISTRY LABORATORY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY, and CHEM2003 GENERAL CHEMISTRY

Course Description: Experiments relevant to General Biology and General Chemistry are conducted to illustrate and consolidate students' understanding of the fundamental concepts and basic principles of the subject. Solid training in basic laboratory techniques in Biology and Chemistry is provided through a series of well-chosen experiments. Students are provided with a solid training in basic laboratory techniques, practical skills, lab safety knowledge, and writing skills of lab report necessary for more advanced laboratory courses and project work.

BIOL2023 CONSERVATION ECOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course emphasises biological functioning at the levels of population, community, and ecosystem, and is organised around the principles of energy flow, nutrient cycles, and succession. Human interventions such as urbanisation, 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. Students will be able to gain the knowledge of basic ecological principles, including species interactions, energy flow, nutrient cycles and succession, and habitats and ecosystems of the Pearl River Delta and Hong Kong.

BIOL2033 FOOD MICROBIOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course covers the basic principles of microbiology as well as some 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, disease and the use of microbiology in food. The objectives of this course are to stimulate the awareness of the vast diversity of microbes in the environment and provide students a background for more advanced courses.

BIOL2043 PRINCIPLES OF BIOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a board perspective in the field of biology, with special emphases on the diversity and unity of living things. The course provides a general understanding of the cell structure and the functions of organelles; and studies the characteristics of major phyla of vertebrates and invertebrates, as well as major plant groups, in respect to their morphology, distribution and diversity. There is particular emphasis on an evolutionary theme so that students can relate plant and animal anatomy and physiology as adaptations in evolutionary history.

BIOL2053 PRINCIPLES OF MICROBIOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to encourage students to appreciate the vast diversity of microorganism. The course provides a general understanding on the nomenclature and taxonomy of microorganisms, as well as their cell structures and functions. The course also provides examples on the applications of microorganisms in our everyday life with emphasis on their applications in environmental science.

BIOL2063 BIOCHEMISTRY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY, and CHEM2003 GENERAL CHEMISTRY

Course Description: This course introduces the basic principles of biochemistry and molecular biology, emphasizing broad understanding of chemical events in living systems in terms of metabolism, structure-function relationships of biologically important molecules with detailed analysis of the structures, properties; functions of proteins, carbohydrates, and lipids; introduction to carbohydrate, lipid and protein metabolisms.

BIOL2073 PHYSIOLOGY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY

Course Description: This course is designed to provide students with an understanding of the function and regulation of the human body and physiological integration of the organ systems to maintain homeostasis. Course content will include neural and hormonal homeostatic control mechanisms, as well as study of the musculoskeletal, circulatory, respiratory, digestive, urinary, immune, reproductive, and endocrine systems.

BIOL2083 THE ECOLOGY AND BIOCONSERVATION IN CHINA

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide the following specific and place-based learning outcomes: gain a broad comprehension of the fundamentals of Chinese culture, art, and food, particularly as it relates to ecological civilization and human sustenance and material wealth; understand the fundamentals of ecology and how these determine current distribution and abundance of plants and animals; understand current human impacts on native biodiversity in China, across a variety of ecosystems; and identify conservation strategies for native biodiversity in China generally, and in the Zhuhai region specifically.

BIOL2093 MICROBIOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to encourage students to appreciate on the vast diversity of microorganism; provide a general understanding on the nomenclature and taxonomy of microorganisms, as well as the cell structures and functions; teach students fundamental skills in microbiology; and provide examples on the applications of microorganisms in our everyday life with emphasis on their applications in environmental science.

BIOL2103 BIOLOGY AND ECOLOGY LABORATORY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY

Course Description: This course is designed to strengthen students' knowledge and practical skills in basic laboratory techniques and develop the essential skills for conducting more advanced laboratory analyses and experimental work related to biology, microbiology, and ecology. Upon completing this course, students should be able to formulate empirically testable hypotheses derived from the observations of living processes and organisms, apply scientific reasoning skills, engage in scientific arguments and discourses as well as apply appropriate techniques of data analyses and critical thinking to evaluate outcomes of experiments.

BIOL3003 ENVIRONMENTAL HEALTH AND TOXICOLOGY

(3 units)

Pre-requisite(s): None

Course Description: The course provides general knowledge concerning the various routes of human might be exposed 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.

BIOL3013 INTRODUCTION TO ENVIRONMENTAL BIOTECHNOLOGY

(3 units)

Pre-requisite(s): BIOL2043 PRINCIPLES OF BIOLOGY, and BIOL2053 PRINCIPLES OF MICROBIOLOGY

Course Description: This course provides a general understanding of the principles and applications of biotechnological techniques in environmental monitoring, pollution control and removal of contaminants, particularly in environmental biomonitoring, biodegradation and bioremediation, biofuel production and waste water treatment. In addition, it introduces specific applications of biotechnology in microbiological wastewater treatment, bioremediation and ecological engineering.

BIOL3023 BIOLOGY AND CHEMISTRY LABORATORY

(3 units)

Pre-requisite(s): None

Course Description: Experiments relevant to General Biology and General Chemistry are conducted to illustrate and consolidate students' understanding of the fundamental concepts and basic principles of the subject. Solid training in basic laboratory techniques in Biology and Chemistry is provided through a series of well-chosen experiments. Students are provided with a solid training in basic laboratory techniques and practical skills necessary for more advanced laboratory courses and project work.

BIOL3033 PRACTICAL BIODIVERSITY CONSERVATION

(3 units)

Pre-requisite(s): BIOL2023 CONSERVATION ECOLOGY, and ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course is designed to teach the biology of nature conservation through a focus on species and habitats of concern together with some elements on conservation management. Students will learn about the common practices of conservation science and management, and how our knowledge in conservation biology influences the development and implementation of policy, land planning and management. Students will also learn about the most contemporary conservation problems as well as species and habitat management practices in the context of a rapidly changing environment. Finally, student will practice to address the anthropogenic biodiversity degradation by managing protected areas and development of conservation plan.

BIOL3043 MOLECULAR BIOLOGY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY

Course Description: This course will build on the knowledge of cell structure and function gained in General Biology and extend students' knowledge of how eukaryotic cells work at the molecular level; provide an overview of cell structure and function at the molecular level, including the flow of information from genes to proteins, and regulation of cellular processes, signalling and proliferation in eukaryotic cells; and introduce some of the major ideas and experimental approaches in cell and molecular biology.

BIOL3053 ENVIRONMENTAL BIOTECHNOLOGY AND LABORATORY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY, and BIOL2093 MICROBIOLOGY

Course Description: This course is designed to provide students with solid training in biotechnology laboratory techniques to solve environmental problems, such as pollutant detection, bioremediation and biofuel production. Upon finishing the course, students should have acquired a set of environmental biotechnological skills which will enable them to conduct more advanced laboratory courses and project work related to environmental biotechnology.

BIOL4003 BIODIVERSITY CONSERVATION

(3 units)

Pre-requisite(s): BIOL2023 CONSERVATION ECOLOGY, and ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course provides an introduction to biodiversity conservation and its implementation. In addition to in-depth discussion of ecological theories which play central roles in understanding the threats to biodiversity and the conservation of biological populations, species and communities, case studies will be used to draw attention towards the interplay of socio-economic, political, and cultural factors in threatening and conserving biodiversity. The roles of NGOs, government agencies and the private sector will also be discussed in detail.

BIOL4023 BIOCHEMISTRY AND BIOTECHNOLOGY LABORATORY

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY, and BIOL2093 MICROBIOLOGY

Course Description: This course is designed to provide students with a solid training in biochemistry and biotechnology laboratory techniques; practical and essential skills necessary for conducting more advanced laboratory courses and project related to biochemistry and biotechnology; critical thinking skills to evaluate and be aware of social and ethical issues related to biotechnology.

BUS1013 BUSINESS, ENTREPRENEURSHIP, AND INNOVATION

(3 units)

Pre-requisite(s): None

Course Description: This is an integrated course designed to provide students with a fundamental understanding of the business environment, the nature and structure of modern business organisations, and selected business functions. It covers a wide range of business topics to help students understand the issues that corporations and professional managers experience. It gives students a macro view of business and provides them with meaningful and real-world-oriented information.

BUS2003 ORGANISATIONAL BEHAVIOUR

(3 units)

Pre-requisite(s): None (for BBA students) or
BUS1023 BUSINESS AND SOCIETY (for non-BBA students) or
BUS1033 INTRODUCTION TO ENTREPRENEURSHIP AND INNOVATION (for non-BBA students)

Course Description: The purpose of the course is to introduce students to organisational behaviour principles and concepts. Students can identify and define key concepts in the organisational behaviour area; define basic theories and research about the nature and functioning of organisations as well as managers' roles and responsibilities within organisations; develop the students' ability to diagnose organisational situations and apply concepts and theories to help solve organisational problems; acquaint with the nature, forms, and scope of behaviour in business organisations.

BUS2013 PRINCIPLES OF LAW

(3 units)

Pre-requisite(s): None

Course Description: Introducing to business students a comprehensive overview of the Hong Kong legal system and the basic principles of contract law and the law of tort, which are two of the important areas of business law.

BUS2023 MARKETING STRATEGY AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide the students with a solid understanding and application of marketing strategy and management. It includes how to formulating a marketing strategy, the development of strategic opportunities through internal and external analysis, the development of competitive advantages through distinctive competencies, and the maintenance of these advantages over time through application techniques like brand development.

BUS2043 PRINCIPLES OF MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The major objective of this course is to provide non-business major students a broad understanding of the field of business and how successful business organisations operate. This understanding should serve them well in whatever professional discipline they pursue, whether they are directly involved as managers or hold other significant stakeholder roles in an organisation.

BUS2053 PRINCIPLES OF LAW

(3 units)

Pre-requisite(s): None

Course Description: (For non-ACCT students.) Introducing to business students a comprehensive overview of the Hong Kong legal system and the basic principles of contract law and the law of tort, which are two of the important areas of business law.

BUS3003 BUSINESS COMMUNICATIONS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with an understanding of the essential concepts, practices and basic models of business communication and to develop their skills necessary for communicating professionally in the current business and technological context. The course emphasises the application of concepts and methods of written and oral communication activities and is focused on developing the students' ability to function in a community and team.

BUS3013 COMPANY LAW

(3 units)

Pre-requisite(s): BUS2013/BUS2053 PRINCIPLES OF LAW

Course Description: This course aims to provide students with an understanding of the company law in Hong Kong covering forms of organisation, lifting corporate veil, constitution of a company, shares and debentures, internal proceedings of a company, director's power and duty, protection of outsiders and minority, charges, fraudulent preference, auditor's liability and dissolution of a company.

BUS3023 BUSINESS RESEARCH METHODS

(3 units)

Pre-requisite(s): Quantitative Reasoning

Course Description: The purpose of this course is to provide students with an overview of research methods that are currently used in business and to develop in the students a strong capacity to grasp the complexity of inquiry into theoretical and applied business problems. The objectives are to introduce students to the theoretical and analytical issues which are shaping contemporary business research thinking and practice, to address the key components which might comprise the essential elements of conducting research in an applied business setting, and to provide opportunities for students to engage in survey, case analyses, experiential exercises and library research which are aimed at skill development in conducting research.

BUS3043 QUALITATIVE RESEARCH METHODS

(3 units)

Pre-requisite(s): Quantitative Reasoning

Course Description: The objective of this course is to impart students with the knowledge and capability to apply different qualitative research approaches to conducting business research projects. This course, which provides a solid foundation on both theories and applications of a variety of qualitative research techniques (including case studies, ethnography, archival research, participant observation, interview and focus group methods, as well as transcription and analysis), will help students in preparing a practical-oriented BBA Project.

BUS4013 STRATEGIC MANAGEMENT

(3 units)

Pre-requisite(s): None (for BBA students) or
BUS1023 BUSINESS AND SOCIETY (for non-BBA students) or
BUS1033 INTRODUCTION TO ENTREPRENEURSHIP AND INNOVATION (for non-BBA students)

Course Description: This course aims to prepare the student for a successful business career by providing them with a broad understanding of the importance and complexity of strategic decisions and how they require an integration of all aspects of business operations. It focuses on developing the skills required of senior/general managers to diagnose business problems and opportunities and to develop and implement effective courses of action.

BUS4023 MANAGEMENT INFORMATION SYSTEMS

(3 units)

Pre-requisite(s): None (for BBA students) or
BUS1023 BUSINESS AND SOCIETY (for non-BBA students) or
BUS1033 INTRODUCTION TO ENTREPRENEURSHIP AND INNOVATION (for non-BBA students)

Course Description: This course aims to provide an introduction to the field of management information systems (MIS). Students will learn how to analyse the business processes for an enterprise system. Then, the technical foundation, including different kinds of hardware and software, will be introduced such that students can think of tools o enhance improvement for the companies. After that, students will learn how the companies apply management information systems to maintain their competitive edge nowadays. Last, but not the least, students will learn how to develop and to manage information systems in organisations.

BUS4033 BUSINESS INTERNSHIP AND HUMAN RESOURCE MANAGEMENT MENTORING

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to give students the opportunity to gain practical experience working in an organisation. Under the guidance of both faculty and workplace supervisors, the students will complete a work assignment of no less than 120 hours, either paid or unpaid.

BUS4043 CROSS-CULTURAL AND COMPARATIVE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The primary objective of this course is to enhance student awareness of the impact of culture on supposedly universal management practices designed to facilitate the effective utilisation and development of the organisation main asset - its employees. Students can expect to enhance their understanding of the global context of organisations, interpersonal skills needed to manage across national borders, and the structure and functioning of multinational companies.

BUS4053 CORPORATE STRATEGY AND MANAGEMENT

(3 units)

Pre-requisite(s): ECON2053 ECONOMICS

Course Description: This course aims to prepare the student for a successful business career with a broad understanding of the importance and complexity of strategic decisions and the need to integrate other aspects of business operations in the decisions, which determine the future direction and effectiveness of an organisation. As the course focuses on the skills required of a general manger in diagnosing and finding solutions for critical problems in complex business situations. Discussions will emphasise the organisation as a whole. To achieve this goal, integration of the knowledge gained in previous courses and an awareness of the impact of the external forces, and of actions by the firm and its rivals on the firm's strategies are crucial.

BUS4063 INTERNATIONAL BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: The primary objectives of this course are: (1) to provide students with a basic understanding of the theories and concepts of international business; (2) to discuss the economic, cultural and political factors in shaping the international business environment; (3) to introduce different functional areas of international corporations management with reference to problems and issues of doing business with developing countries and centrally planned economies' and (4) to familiarise students with the international business activities of Hong Kong companies.

BUS4073 BBA PROJECT I

(3 units)

Pre-requisite(s): None

Course Description: The course aims to provide an opportunity for students to work in two-person teams to: (1) develop their individual analytical and intellectual abilities; (2) apply the knowledge and skills gained from the degree programme and their specialization area to a real, practical business problem; enhance their writing and presentation skills, and (3) equip themselves with the research skills that can be utilized after their graduation as part of their lifelong learning.

BUS4083 BBA PROJECT II

(3 units)

Pre-requisite(s): BUS4073 BBA Project I

Course Description: This is a continuation of BUS4073 BBA Project I. Students will continue with the work that they completed in BUS4073. At the end of this course, students should be familiar with how to collect and analyze data, document all findings, interpret the results, write the implications of the findings, and offer some recommendations for future studies. The deliverable is a 30-page project report with proper citations and relevant references, encompassing all the work that they have performed in BUS4073 and BUS4083. Students in each group will also present their project to their supervisor and an internal reviewer.

BUS4093 MANAGEMENT INFORMATION SYSTEMS

(3 units)

Pre-requisite(s): None (for BBA students) or
BUS1023 BUSINESS AND SOCIETY (for non-BBA students) or
BUS1033 INTRODUCTION TO ENTREPRENEURSHIP AND INNOVATION (for non-BBA students)

Course Description: (For non-ACCT students.) This course aims to provide an introduction to the field of management information systems (MIS). Students will learn how to analyse the business processes for an enterprise system. Then, the technical foundation, including different kinds of hardware and software, will be introduced such that students can think of tools o enhance improvement for the companies. After that, students will learn how the companies apply management information systems to maintain their competitive edge nowadays. Last, but not the least, students will learn how to develop and to manage information systems in organisations.

BUS4103 FINAL YEAR PROJECT (BUSA)

(3 units)

Pre-requisite(s): None

Course Description: The course aims to provide an opportunity for students to work in groups to: (1) develop their individual analytical and intellectual abilities; (2) apply the knowledge and skills gained from the degree programme and their specialization area to a real, practical business problem; (3) enhance their writing and presentation skills, and (4) equip themselves with the research skills that can be utilized after their graduation as part of their lifelong learning.

CCGC1003 CHINA'S ROLES IN THE GLOBAL SYSTEMS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the foundational components of Chinese culture from the perspective of interdisciplinary studies. In chronical order from the Bronze Age to the Republican Period, the course examines the cultural roots of social and political institution, the torrents of intellectual thoughts, religious traditions, education, gender, and arts. Important to note, the objective of the course is twofold: First, to improve students' comprehensive understanding of the key issues of Chinese culture within the global context and its interactions with Chinese politics, society, and the present-day life of the Chinese people; Second, the course helps students with developing multidisciplinary skills across philosophy, history, and sociology, and perceive a topical focus in Chinese culture.

CCGC1013 INTRODUCTION TO COMMUNICATION THEORIES

(3 units)

Pre-requisite(s): None

Course Description: The course is an introduction of the basic concepts, processes and contexts in the study of communication. The course explains listening, perceiving, using verbal and nonverbal communication, and establishing climate. Then these processes are applied to various contexts such as interpersonal, small group, public, organizational, intercultural, mass communication, personal, and social media

CCGC1023 CHINA IN ESE IN WESTERN CULTURES

(3 units)

Pre-requisite(s): None

Course Description: This course is to introduce students to specific themes and approaches of understanding Chinese civilization and its legacies in historical perspectives through the Westerners' eyes. Over the course of the semester, students will be given opportunities to explore the question of what constitutes "China" from a variety of conventional European-inspired historical perspectives through studying different political, social, economic and cultural forces that shaped the emergence of China in the Westerners' minds as an identifiable entity in the world today. The course will be divided into two major sections. The first section highlights and explores some of the foundational and controversial themes in the European-written Chinese history from antiquity to the present, including the rise and spread of intellectual traditions, economy and material culture, and the formative processes and the change of the social structures and gender relations. The second section examines the West's encounter with China and testifies a multiplicity of intellectual thoughts and attitudes that Westerners have brought to their attempts to deal with the phenomenon of China. At the end of the course, students are expected to have developed a critical reading and thinking ability to explore the universal values, attitudes, and the way how the West has understood China in the context of West-dominated historical narratives.

CCGC1033 CHINESE PHILOSOPHY IN THE GLOBAL CONTEXT

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with a comprehensive view of the social life and the thought of social life in medieval China. Raised by Jürgen Habermas, the theory of "public sphere" has been popular for almost half a century, and public sphere is nowadays a hot field of culture studies. The course aims to help students cultivate their ability to interpret Chinese traditional life from the perspective of Western theories. To meet the goals of the course, students will, after lecture and class discussion, take quizzes which will test their knowledge of a) key ideas and movements of public sphere from Wei to Jin dynasties; b) the basic theory of "public sphere" and some famous critique of it; c) the cause & effect relationships that help to explain the change of social life and idea in this period; and. Students will also write one short paper, in which they prove that they have read and grappled with one book dealing with a single field of social life of medieval Chinese society.

CCGC1043 SOCIAL DEVELOPMENT IN IMPERIAL CHINA

(3 units)

Pre-requisite(s): None

Course Description: This course is an introductory survey of the intellectual history of China. It covers multiple intellectual movements of China from the pre-Qin period to the early 21st century through introducing key texts of these movements. Multiple themes such as harmony, homogeneity/heterogeneity, conflict and unity, diversity and sustainability etc. will be introduced in these texts, and students are expected to analyse how these themes shaped modern and contemporary intellectual movements in China. Students are also expected to apply these themes to analyse the contemporary Chinese society.

CCGC2003 TOPICS IN CHINESE INTELLECTUAL HISTORY

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to Chinese intellectual history. It aims to equip students with the knowledge of Chinese intellectual history from the seventh to the nineteenth century. From an epistemological perspective, it focuses on introducing students to the thought and beliefs held by the intellects. Through the course, students will develop skills in analysing the canonical texts and be encouraged to interpret the form of certain opinion in various historical conditions.

CCGC2023 INTRODUCTION TO CHINESE LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to help students master the knowledge system of literary theory systematically; have a more comprehensive and in-depth understanding of the important concepts, knowledge points and general principles of literary theory; have the ability to analyse literary phenomena and artistic works by using literary theory, and be able to interpret various literary problems more accurately from the perspective of aesthetics and history.

CCGC2033 CHINESE PHILOLOGY

(3 units)

Pre-requisite(s): None

Course Description: The teaching goal of this course is through explaining the structure, characteristics, form evolution and application of Chinese characters, to make the students master the basic knowledge of philology, to facilitate deepening the relationship of ancient Chinese and modern Chinese. It also provides the knowledge reserve for the students who will do the Teaching Chinese to Speakers of Other Languages.

CCGC2043 COMMUNICATIVE ASPECTS OF CLASSICAL CHINESE POETRY

(3 units)

Pre-requisite(s): None

Course Description: Course Description: This course focuses on selecting the most classical works of ancient poetry and guides your understanding on the spirit of traditional Chinese culture. It introduces the basic background of Chinese poetry alongside different interpretations of various works. The course highlights the life and social ideals of the times, artistic innovations, and classical languages in context. Through in-depth analyses of specific works, you will explore various problems humans faced in the process of societal development; while intending to encourage an independent and positive approach.

CCGC2053 SELECTED READINGS OF CLASSICAL CHINESE PROSE

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the great tradition of classical Chinese prose written from pre-Qin period to the Qing dynasty. Our survey covers a wide range of traditional Chinese literary works. Classroom activities include discussions, presentations and analysis on the themes, characteristics and writing techniques. Students are expected to do a good deal of research on historical background, author's biography and writing style of the readings. It is our hope that through the study of this course students will develop a better sense of the richness and diversity of traditional Chinese prose, understanding various kinds of literary forms, styles and ideals that appeared during the different historical periods.

CCGC2063 TRADITIONAL CHINESE NOVELS IN COMPARATIVE PERSPECTIVES

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to make students understand and appreciate the great tradition of classical Chinese fiction. The course is also focused on training students to have a good command of the styles and techniques of the major important works and writers. Since all readings are in classical Chinese, students are expected to do more work on the vocabulary and structure of the text than they usually do in a modern language class. Through the study of this course students will not only improve their ability in comprehension of classical Chinese language but also increase their knowledge of Chinese civilization and culture.

CCGC3003 TRADITIONAL CHINESE CIVILIZATION IN THE GLOBAL CONTEXT

(3 units)

Pre-requisite(s): CCGC1003 CHINA'S ROLES IN THE GLOBAL SYSTEMS

Course Description: This course introduces the knowledge on the various aspects of China's unique cultural qualities and achievements from past to present, teaching students a rich vocabulary to illustrate the historical eras of Chinese civilization, the kills to critically analyse various cultural phenomena by looking at a wide spectrum of traditional Chinese ways of life, and the awareness, interests and curiosities in Chinese history and civilization from a cultural perspective.

CCGC3013 LANGUAGE AND CROSS-CULTURAL COMMUNICATION

(3 units)

Pre-requisite(s): ENG1013 INTRODUCTION TO THE STUDY OF LANGUAGE or ENG1013 FOUNDATIONS OF LANGUAGE STUDIES

Course Description: This course is designed to help students to master basic concepts and theories of cross-cultural communications,

develop an understanding of communication practices between people of different cultural identities, in terms of values, behaviours, ways of thinking and customs, etc. Eventually the course will strengthen their cross-cultural communication awareness and skills through lectures, teacher-student interaction, scenario simulation, case analysis, etc.

CCGC3023 HISTORY OF WESTERN SINOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to sinological studies in the West. Through close-reading of relevant articles and books, it aims at helping students have a general understanding of the field of sinology, and gain skills of academic reading and writing.

CCGC3033 HISTORY OF SINO-FOREIGN CULTURAL EXCHANGE

(3 units)

Pre-requisite(s): CCGC1023 CHINA IN WESTERN CULTURES

Course Description: This course aims to provide important concepts and thoughts about the history of Sino-Foreign cultural exchanges from prehistory to the end of Qing Dynasty. The course explores the influence of Chinese culture on foreign cultures, and the ways in which these foreign cultures in their turn influenced and impacted on Chinese culture. With a focus on summarizing and reflecting critically on the historical experiences and lessons of Sino-Foreign cultural exchanges, students are expected to increase awareness of cross-cultural communication and lay a foundation of knowledge and theory for related academic research and professional work.

CCGC3043 POPULAR CULTURE AND MASS MEDIA

(3 units)

Pre-requisite(s): MCOM1003 INTRODUCTION TO MEDIA STUDIES

Course Description: This course provides students with an overview of popular culture and mass media, examining the connection between mass media and multiple forms of popular culture and art. The course explores the evolution of mass media, and its role in shaping popular culture throughout 21st century. In addition to the acquisition of significant theories relevant to media and communication, we will discuss a wide range of topics, including social, political, and cultural organization of mass communication and its impact on values, expectations, and life style of contemporary society. Students are expected to demonstrate understanding of the social relationship between mass media and the general population.

CCGC3053 EAST ASIAN SINOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide a detailed and inspiring introduction of Sinology in East Asia, which has a long tradition and can provide students with various perspectives of interpretation of traditional Chinese culture. First, it will demonstrate how prestigious scholars from Japan and South Korea conduct their researches on Chinese literature, Chinese thought, and Chinese culture. Secondly, it will analyse the difference between the methodologies used by scholars from Japan and South Korea and the methodologies used by Chinese scholars. Thirdly, we will encourage students to conduct their own primary research based on what they learn in this course.

CCGC3063 CHINESE CLASSICS AND THEIR GLOBAL CIRCULATION

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to the *Book of Songs*. The aims and objectives of this course are to help students understand the *Book of Songs*, and enhance their pride in the cultural heritage of the motherland and cultivate their patriotic feelings. Through in-depth study of *Book of Songs*, students will gain the ability of academic creative thinking. This course will focus on topics such as the circulation of *Book of Songs*, classification of *Book of Songs*, the cultural spirit of *Book of Songs*, the art form of the *Book of Songs*, as well as the historical status and influence of *Book of Songs*.

CCGC3083 CHINESE CLASSICS AND CHINESE CULTURE

(3 units)

Pre-requisite(s): None

Course Description: The main goal of the course The Studies on Classics and Chinese Culture is to enhance the students' understanding of the development of the History of Chinese Classics and other related topics of importance, as well as to interpret the mutual relations between the History of the Classics and History of Intellectual Thought through multiple perspectives.

CCGC3093 UNDERSTANDING COMMUNICATION IN CHINESE CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course provides an understanding of communication art in Chinese culture from a global perspective. Throughout the course, students will explore the cultural nuances, uniqueness and challenges of communication in Chinese culture, including the impact of Confucianism and traditional Chinese values in both private and public spheres. With active participation in class activities, students are able to develop cultural sensitivity in effective communication in Chinese culture.

CCGC3113 INTERNSHIP (CCGC)

(3 units)

Pre-requisite(s): None

Course Description: This course aims to give CCGC students a chance to do internships at various cultural, educational, and media organizations to help solidify their knowledge.

CCGC4003 CHINESE LITERATURE AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course mainly introduces the development stage and process of Chinese modern and contemporary literature, analyses the important writers, works and literary trends of Chinese modern and contemporary literature. Through a large number of works reading and analysis, this course can improve students' reading, appreciation, writing ability in literature, and critical thinking skills, cultivate students'

international perspective and intercultural awareness, as well as interdisciplinary skills.

CCGC4013 EMINENT SINOLOGISTS AND THEIR WORKS

(3 units)

Pre-requisite(s): CCGC3023 HISTORY OF WESTERN SINOLOGY

Course Description: This course is an introduction to works of famous Sinologists whose fields cover Chinese literature, philosophy, history and culture. First of all, we will introduce the main achievements of these Sinologists in different fields. Secondly, we will explore the methodologies used by them to conduct their research, through close reading of their works. Thirdly and finally, we will try to demonstrate how these Sinologists' works could provide new perspectives for research on traditional Chinese culture.

CCGC4023 FINAL YEAR PROJECT (CCGC)

(3 units)

Pre-requisite(s): None

Course Description: The Final Year Project (FYP) is a capstone that brings together academic and professional skills acquired in the programme. Under the guidance of a supervisor, the student will identify a suitable research topic; find research materials; narrow the topic; read, evaluate, and interpret materials; write, edit, and polish, and, finally, document and present the work.

CCGC4033 AESTHETICS OF CHINESE CINEMA

(3 units)

Pre-requisite(s): None

Course Description: This course aims to systematically introduce the development history of Chinese film and the basic concepts of Chinese film aesthetics. This course can help students deeply understand the important "genre films"（Fiction Movie, Sports Movie, Newsreel, Action, Thrillers, Animated Movie, Documentary） of Chinese films in different periods, as well as the social background, creative characteristics and aesthetic style behind the films, through reading literature and watching films. At the end of the course, how Chinese films maintain their own advantages and national characteristics in the choice of market under the background of film globalization will be discussed.

CCGC4043 STUDIES OF CONTEMPORARY CHINESE LINGUISTICS

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to basic concepts and theories related to contemporary Chinese phonetics, characters, vocabulary, grammar, and rhetoric. It also focuses on application of the above knowledge of Chinese language for pedagogic purposes, especially to discriminate and interpret the meaning of words, identify parts of speech, analyse sentences, and use rhetoric appropriately, as well as to explain linguistic errors in second language acquisition. The course will also help students to explore a comparison between Chinese language and related languages, and be familiar with characteristics of Chinese language.

CCGC4053 CHINESE DIASPORA AND TRANSNATIONAL MIGRATION

(3 units)

Pre-requisite(s): None

Course Description: This course offers popular topics concerning the phenomenon of Chinese Diaspora and the Overseas Chinese literature within the context of international migration movements. In a perspective of world literature and globalization, this course aims to guide the students to read classical Overseas Chinese literature to empower their appreciations of Sinophone literature and aesthetic sentiment, to understand the nationality and localization of world literature, and to enhance the identification of Chinese national culture and the preservation of Chineseness across different nations in the present world.

CCGC4073 CHINESE CULTURAL RESOURCES AND CREATIVE INDUSTRIES

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to the cultural resources and creative industries in the post-industrial Chinese economy, and it spans across the disciplines of the arts, media, design and heritage. Drawing on case studies of a range of cultural and creative industrial models, and comparing them with international examples, this course will discuss how developments in Chinese cultural industries are reflected in national and regional policies, in market activities, and eventually how culture can be industrialized.

CCM2063 PRINCIPLES OF EXHIBITION DESIGN

(3 units)

Pre-requisite(s): None

Course Description: The course will provide students the fundamental knowledge of spatial functionality, expression and management embedded in exhibition design. It will also give basic theoretical development and 3D skills of exhibition design by exploring various ideals of exhibition. As a result the course will equip students with basic skills in instructing an outline scheme design for exhibitions.

CCM2093 CULTURE, CREATIVITY AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course helps students to understand the fundamental elements of cultural and creative industries, and help them to develop basic understanding of the key management issues in the industries, and to grasp the basic analytical tools to describe and analyse the cultural and creative enterprises.

CCM2113 EVENT PLANNING AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides a basic knowledge of event planning and management. It forms an introductory study of the events industry focusing on academic theories, which can be applied to the real-world situations. A wide range of topics relating to event planning and event management, such as event trends, event concepts, event planning and logistics, and Integrated Marketing Communications theory in event management will be covered in this course. Students will learn and practice from

concepts to delivery. The course discusses various aspects of planning and managing a variety of event typology including events of festivals, culture, arts, politics, sports and other forms of business and leisure events on the different cultural contexts.

CCM2123 PAST TO PRESENT STATE OF ARTS IN CULTURAL INDUSTRIES

(3 units)

Pre-requisite(s): None

Course Description: The contextual study of arts is a basic foundation for creating all arts forms or media in Cultural and Creative industries. This course provides an introductory approach through the historical western art development mainly with a few topics on Asian art. The students will learn arts appreciation and analysis at various periods from the past to the current time with theories and apply into practical projects. It will also enrich their experience in art-making through the visual presentations on art topics.

CCM3023 CULTURAL POLICY, ECONOMY AND DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce to students the basic, theoretical and analysis tools in cultural economy and cultural policy in various areas of creative industries. They include cultural production, pricing, consumption, expenditure, investments, copyrights, cultural heritage policy etc. It employs a global view to analyse how these two interrelated paradigms have been developed, in particular over the past 20 years when new global cultural order has gradually developed while new national cultural identities have been built worldwide.

CCM3033 INTERNATIONAL CULTURAL TRADE

(3 units)

Pre-requisite(s): None

Course Description: The main objective of this course is to enable students to master the fundamental concepts, principles, systems, management and policies of international cultural trade. The course will teach students the formation, development of the trade theories, the operation of cultural agencies, exhibition and digital trade in different countries. It is aiming at nurturing students' ability in applying cultural trade theories and methodologies in problem analysis and problem solving.

CCM3083 CULTURE, CREATIVITY AND MANAGEMENT IN CHINESE CITIES

(3 units)

Pre-requisite(s): None

Course Description: The course provides in-depth analyses and discussions of cultural and creative industries in modern Chinese cities, in particular, Hong Kong, Guangzhou, Shenzhen, Shanghai and Beijing. The content focuses on the application of theoretical frameworks of culture and creativity studies in cultural and creative industries in Chinese cities.

CCM3093 BASIC STUDIES OF CULTURAL TOURISM IN CHINA

(3 units)

Pre-requisite(s): None

Course Description: The course equips students with basic theories of tangible and intangible heritage, and introduces cultural heritage in China. The student will be able to analyses heritage management issues on the context of cultural tourism in China. Students also will be able to identify and explain how to development cultural tourism products, analyse cultural tourist and conduct business operation of cultural tourism.

CCM3103 FOOD AND BEVERAGE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the nature and characteristics of food and beverage business from the perspectives of customers, product and operation. The student will identify the growth of the food and beverage service industry, their classification and systems of operation; the nature of customer demand and explain the importance of the consumer-product relationship as a function of the business environment. Furthermore, students will be able to analyse business operation of food and beverage industries management, and evaluate key issues in restaurant and bar management.

CCM3113 INTRODUCTION TO HOSPITALITY MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is intended to provide students with comprehensive overview of hospitality industry. At the completion of this course, student will understand the major concepts and issues on hospitality industry; will grasp the key components of each sector of the hospitality industry and how they interrelate; will access various career options in the hospitality industry; will apply the contents of the course to an actual ongoing hospitality setting.

CCM3123 CONCEPTS IN SPATIAL DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introductory level of spatial design covering basic skills of 3-dimensional drawings, model making and the visual representation related to the services covered under the Creative Industries. They will learn how to describe the projects based on design elements and principle of organization such as line, form, space, scale, proportion, culture and human perception of space. They will develop their visual communication styles through hand drawing and computer tools.

CCM3133 EXHIBITION DESIGN: CREATIVE INTERPRETATION AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: Students will acquire the basic understanding of creative interpretation in Cultural Industries. The course focuses on the area of exhibition design management, including the theories and applications on exhibit interpretation with design elements and principles of organization. Besides, it will also cover management

theories including target audience, market segmentation and financial budgeting. Practical cases will be explored from their conceptual development, research, design, management and finally exhibition through the chain of creative and innovative processes.

CCM3143 PUBLIC ARTS AND MUSEUM DESIGN MANAGEMENT IN THE URBAN ENVIRONMENT

(3 units)

Pre-requisite(s): None

Course Description: The course will provide the basic concepts, types, styles and impacts of public arts in the urban city environment, covering functions and aesthetic values. Public arts can be displayed outdoors and also in an enclosed setting in museums. It will also cover a series of basic guidelines to all scopes of museum management, from audience development and education, collections management and conservation, to museum organization and forward planning.

CCM3153 CONSUMER BEHAVIOUR IN CULTURAL INDUSTRIES

(3units)

Pre-requisite(s): None

Course Description: The foundation of the study of human consumer behaviour will be laid in this course. As such, it introduces students to the basic approaches to studying consumer behaviour, explains the theories underlying the understanding of consumers and their behaviour, and empowers students to apply the theory in practical settings. Forming an intrinsic part of business and marketing strategy, an understanding of consumer behaviour helps future business leaders to research and understand the forces shaping society. It will also help them to understand what inputs are required in responsible consumer decision-making.

CCM3163 PRINCIPLES OF CREATIVE ARTS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The course aims at providing theories and practical applications from all arts management perspectives including planning, marketing, finance, economics, organization, staffing, and group dynamics.

CCM3173 CONCEPTS OF CONTEMPORARY ARTS IN CULTURAL INDUSTRIES

(3 units)

Pre-requisite(s): None

Course Description: This course will focus on the development of art movements and art trends in the Cultural and Creative Industries. The scopes will cover from mid-twentieth century to the present time with a view on the current development in western countries, the modern and post-modern art of Asia Pacific region and Hong Kong. It aims to provide students with both theories and applications of the current art scenes of the global world and China as from 1945 to the current decade.

CCM3183 APPROACHES TO CREATIVITY

(3 units)

Pre-requisite(s): None

Course Description: The course aims to foster a deep understanding and application of both classical and contemporary creativity skills within the cultural and creative industries. It addresses the essential need for student who can adopt a transdisciplinary approach, thinking both within and beyond conventional contexts. Students will be encouraged to apply innovative thinking to address real-world challenges, while also investigating the fundamental principles of creativity and strategies to overcome creative obstacles. The course introduces lateral thinking and a variety of creative problem-solving tools, which are particularly relevant to the cultural sector. Additionally, students will learn about idea incubation and the effective management of creative teams.

CCM3193 AI IN CREATIVE INDUSTRIES

(3 units)

Pre-requisite(s): None

Course Description: This course explores the dynamic relationship between creativity, innovation, and artificial intelligence (AI) within the creative industries. It aims to provide students with the theoretical foundation of creativity while introducing the role of AI in shaping creative processes. From generative AI tools to ethical considerations, students will examine how AI is revolutionizing fields such as art, design, and media production. The course balances hands-on experimentation with critical reflection on the implications of AI for creative professionals and the wider cultural sector.

CCM3203 AI-DRIVEN CURATION: ENHANCING MUSEUM EXPERIENCES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to explore how museums incorporate AI in its management, mainly for curation, which is a key function of the institution. In particular, this course pays a close attention to understand how AI-driven curation can contribute to enhancing and expanding audiences' museum experience. It provides students with key theoretical concepts in museum studies, such as, curation, collection, and audience development and engagement, while highlighting an emerging role of AI in curation and visitor experience in museums. After successfully completing the course, students will obtain fundamental knowledge about curation and visitor experiences in museums along with a critical role of AI in conducting these tasks.

CCM4023 MANAGEMENT OF MEDIA PRODUCTION

(3 units)

Pre-requisite(s): None

Course Description: The course will explain how media production plays an essential role in Cultural and Creative Industries both in theoretical and practical aspects. This course has two parts. Part 1 examines the roles and skills of a film producer, categories of productions and analyses the proper procedures for production management from initiation to completion. Part 2 focuses on how media organisations and production companies of various scales are managed.

CCM4033 CULTURAL INDUSTRIES INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The aims of the internship are to provide a direct link between the academic core of the course and the disciplines and methods of practice; to enable students to experience aspects of practice and provide the opportunity for them to work in areas of the field outside their specific expertise; to enable students to observe, analyse and comment on the interaction between theoretical and practical issues as it is practiced, and to establish connections between practice and the development of relevant research programs and suggest appropriate research directions so as to improve the complementarities of theory to practice.

CCM4043 FUNDRAISING FOR ARTS AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: The course will explain the basic concepts and theories about fundraising, including practical tools, strategies and methods. It will also provide guidelines for organizations by relating important principles to on-the-job situations and also on the most current fundraising techniques.

CCM4053 CULTURAL HERITAGE AND TOURISM

(3 units)

Pre-requisite(s): None

Course Description: The course introduces modern theories on heritage management and explores the current issues on conservation and preservation of cultural heritage. It provides comprehensive examination of cultural heritage management in tourism operation. The focus is on the balance between cultural heritage management and tourism developments.

CCM4063 COMMERCIAL SPACE PLANNING AND FACILITIES MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The course will provide a comprehensive coverage of the Meetings, Incentives, Conventions and Exhibitions (MICE) under the Cultural and Creative Industries. It will also brief about key marketing and managerial aspects as well as details of requirements for congress, conference, training and exhibition centres, hotels, universities, galleries and visitor centres. Facilities management will be explained together with case studies or examples.

CCM4073 INDUSTRIAL AND RETAIL DESIGN MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The course aims at introducing the role of industrial design and retail design management as part of the cultural industries. It introduces industrial design as a creative thinking process by working through a practical project. Emphasis will also be put on retail design management and visual merchandising of the industrial product. A wide range of theoretical and practical cases on package design and displays will be used to illustrate the creative thinking methods and how these concepts could be realised in the real world.

CCM4083 CUSTOMER RELATIONSHIP MANAGEMENT IN CULTURAL INDUSTRIES

(3 units)

Pre-requisite(s): None

Course Description: Consumer Relationship Management (CRM) is what sets winning organizations apart from others. Acquiring and keeping customers, and then developing those customers, are key components of successful business strategies. This course aims to introduce students to the essential concepts of CRM and explains its manifold benefits to them. It will expose them to current technologies that are used in CRM, and how to plan and implement successful CRM strategies throughout the customer's lifecycle.

CCM4093 FINAL YEAR PROJECT (CCM)

(3 units)

Pre-requisite(s): BUS3023 BUSINESS RESEARCH METHODS

Course Description: This course focuses on the training for the CCM students: (1) to nourish their basic academic and analytical research capabilities in Cultural Industries; (2) to apply the research knowledge and skills gained from the Cultural Industries to a practical business problem; and (3) to prepare themselves from academic field to the workplace situation with basic research concepts, methodologies and data analysis.

CCM4103 APPLIED SEMIOTICS FOR THE CULTURAL ENTREPRENEUR AND MANAGER

(3 units)

Pre-requisite(s): None

Course Description: The course aims to enhance the skills of students in mastering the metacognitive knowledge and procedural knowledge to study the mindset of cultural entrepreneur and manager from diversified media communications (new media, social media and traditional media). Students will learn how to apply fundamental “Semiotics” theory (Sign and Symbol) to analyse the facts and content from multiple channels of media communications.

CCM4113 HYPER-REALITY AND APPLICATION OF SIMULATION SKILLS

(3 units)

Pre-requisite(s): None

Course Description: The course aims to enhance the skills of students in mastering the simulation from Virtual Reality (VR) technology and Immersive Media. Student will apply the immersive technology (3D, 360 camera and 4D camera) to create the application of simulation for cultural or creative media communication.

CHEM2003 GENERAL CHEMISTRY

(3 units)

Pre-requisite(s): None

Course Description: This course gives a cursory treatment of topics from physical and organic chemistry. The topics discussed include chemical bonding and intermolecular forces, basic concepts in thermodynamics, chemical kinetics, stereochemistry and conformation, chemistry of carbonyl and other important organic functional groups. Specifically, The course provides students with (i) a solid understanding of the fundamental concepts and basic principles of chemistry; (ii) knowledge in organic chemistry

required for more advanced courses such as Biochemistry Physiology, Analytical Chemistry and Food Toxicology.

CHEM2023 PRINCIPLES OF CHEMISTRY

(3 units)

Pre-requisite(s): None

Course Description: This course gives a cursory treatment of topics from physical and organic chemistry pertaining to Environmental and Life Sciences. The topics that will be discussed include chemical bonding and intermolecular forces, basic concepts in thermodynamics, chemical kinetics, stereochemistry and conformation, chemistry of carbonyl and other important organic functional groups. Specifically, The course provides students with (i) a solid understanding of the fundamental concepts and basic principles of chemistry; (ii) knowledge in organic chemistry required for more advanced courses, such as biochemistry and physiology, environmental health and toxicology.

CHEM2033 ANALYTICAL CHEMISTRY

(3 units)

Pre-requisite(s): CHEM2003 GENERAL CHEMISTRY

Course Description: This course introduces students to the basic techniques and instrumentation in modern chemical analysis relevant to food science. It provides a suitable analytical chemistry background for students in food science to pursue other more advanced courses. The topics discussed include (i) steps in an analytical process; (ii) extraction techniques; (iii) evaluation of results: errors, statistical treatment, calibration curves; (iv) classical analytical methods: gravimetric analysis; (v) atomic and molecular spectrometry; (vi) mass spectrometry; and (vii) chromatographic techniques.

CHEM2043 PHYSICAL CHEMISTRY

(3 units)

Pre-requisite(s): CHEM2003 GENERAL CHEMISTRY

Course Description: This course introduces students the concepts and basic principles of thermodynamics and kinetics, and a vision of matter-energy relationship in physical and chemical systems. It helps students to understand transformations at the molecular level and enables them to have a physicochemical approach to perform and analyze experiments.

CHEM2053 CHEMISTRY LABORATORY

(3 units)

Pre-requisite(s): None

Co-requisite(s): CHEM2003 GENERAL CHEMISTRY

Course Description: This course provides students with a solid training in basic chemistry laboratory techniques; practical and essential skills necessary for conducting more advanced laboratory analyses and experimental work related to chemistry.

CHEM2063 ORGANIC CHEMISTRY

(3 units)

Pre-requisite(s): CHEM2003 GENERAL CHEMISTRY

Course Description: 1. To introduce students the foundations of organic chemistry. 2. To understand the structure and reactivity of organic molecules. 3. To provide students with general knowledge of the classification, structure, nomenclature, reactions, reaction mechanisms, and synthesis of various carbon compounds. 4. To provide a suitable organic chemistry background for students to pursue other more advanced courses.

CHEM3003 PRINCIPLES OF BIOCHEMISTRY AND PHYSIOLOGY

(3 units)

Pre-requisite(s): CHEM2023 PRINCIPLES OF CHEMISTRY

Course Description: This course offers fundamental knowledge about the integration between biochemistry and physiology. The course deals with molecular, cellular, and integrative physiology. Topics include carbohydrate, protein, and fat metabolism, enzymology, nutrition, cardiovascular and respiratory systems, homeostasis, nitrogenous waste excretion, and osmoregulation.

CHEM3013 CHEMICAL ANALYSIS

(3 units)

Pre-requisite(s): CHEM2023 PRINCIPLES OF CHEMISTRY or CHEM2003 GENERAL CHEMISTRY

Course Description: This course is for the Environmental Science Programme. This course discusses techniques and instrumentation in modern chemical analysis relevant to environmental and life sciences. It provides a suitable analytical chemistry background for students in environmental and life sciences to pursue other advanced courses, such as Environmental Analysis and Monitoring. The topics discussed include (i) errors and statistical treatment of data, (ii) aqueous equilibria of acids and bases, (iii) titrimetric and gravimetric analysis, (iv) atomic and molecular spectrophotometric analysis, (v) mass spectrometry, and (vi) solvent extraction and chromatographic techniques.

CHI1053 UNIVERSITY CHINESE (MORALITY AND FOUNDATIONS OF LAW)

(3 units)

Pre-requisite(s): None

Course Description: This course centres on the core value of Chinese socialism, together with instructing the wide range of classic works in Chinese literature, philosophy, and culture. The objectives of the course will be two folds. On the one hand, it aims to resolve a variety of problems relevant to students' political and ideological education during their formative years, promoting the dissemination of Chinese patriotism and implementing Marxism education on students' view of life, value and ethics, and world outlook. In the meantime, the course is seeking to direct students to explore the truth and improve their comprehensive understandings of the world, society, and individual life, to eventually achieve the goal of self-cultivation in ethics and thought.

CHI1063 CHINESE CULTURE AND MODERN CHINA

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to help students understand modern Chinese history, and cultivate their patriotism and sense of historical mission through an in-depth study of modern Chinese history, focusing on topics such as pre-modern Chinese material and spiritual life, revolution and reform, how Marxism and Chinese Communist Party developed in China, as well as "Reform and Opening-up" policy, etc.

CHI1073 CONTEMPORARY CHINESE SOCIETY AND THOUGHT (THEORIES)

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to help students: 1) accurately grasp the theories developed during the process of Sinicization of Marxism; 2) comprehensively understand the historical progress, innovations, and achievements of Chinese people's revolution, construction, and reformation led by the Chinese Communist Party; 3) be completely aware of the basic theories, fundamental policies, and general plans insisted by the Chinese Communist Party in the new era; 4) have more complete cognition of contemporary Chinese society; and 5) improve abilities to analyze and solve practical problems.

CHI1073 CONTEMPORARY CHINESE SOCIETY AND THOUGHT I

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to help students: 1) accurately grasp the theories developed during the process of Sinicization of Marxism; 2) comprehensively understand the historical progress, innovations, and achievements of Chinese people's revolution, construction, and reformation led by the Chinese Communist Party; 3) be completely aware of the basic theories, fundamental policies, and general plans insisted by the Chinese Communist Party in the new era; 4) have more complete cognition of contemporary Chinese society; and 5) improve abilities to analyze and solve practical problems.

CHI1083 CONTEMPORARY CHINESE SOCIETY AND THOUGHTS (SOCIAL PRACTICE)

(0 unit)

Pre-requisite(s): None

Course Description: The aims and objectives are to make students accurately grasp the theories developed during the process of sinicization of Marxism; comprehensively recognize the historical progress, historical innovation, and historical achievement of people's revolution, construction, and reformation led by Chinese Communist Party; be completely aware of the basic theories, fundamental policies, and general plans insisted by Chinese Communist Party in the new era; have a more complete recognition of contemporary Chinese society, and cultivate the ability of analysing and solving problems.

CHI1093 CONTEMPORARY WORLD AND CHINA

(0 unit)

Pre-requisite(s): None

Course Description: This course will be based on the "Situations of Higher Education and Policy Education and Teaching" issued by the Ministry of Education, focusing on topics such as the characteristics of current international and domestic situation, higher education reformation, and university growth. We will introduce current hot events in politics, economics, culture, science and technology, education, legal system, art, diplomacy, military, and academic research at home and abroad, and introduce analysis on the causes, changes, and effects of these events. This course will take the form of lecture series. The aims and objectives of this course are to improve students' analytical and reasoning skills, as well as their international vision, and to cultivate outstanding talents for comprehensive development.

CHI1103 INTRODUCTION TO MODERN SOCIAL THEORIES

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to: 1) improve students' viewpoints of modern social theories, specifically, Marxist philosophy, political economy, and scientific socialist theories; 2) develop students' substantial ability to analyze and solve practical problems emerging out of the current society under the framework of Marxist theories.

CHI1183 CONTEMPORARY CHINESE SOCIETY AND THOUGHTS (SOCIAL PRACTICE)

(2 units)

Pre-requisite(s): None

Course Description: The aims and objectives are to make students accurately grasp the theories developed during the process of sinicization of Marxism; comprehensively recognize the historical progress, historical innovation, and historical achievement of people's revolution, construction, and reformation led by Chinese Communist Party; be completely aware of the basic theories, fundamental policies, and general plans insisted by Chinese Communist Party in the new era; have a more complete recognition of contemporary Chinese society, and cultivate the ability of analysing and solving problems.

CHI1193 CONTEMPORARY WORLD AND CHINA

(2 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to improve students' analytical and reasoning skills, as well as their international vision, and cultivate students' outstanding talents for comprehensive development. This course focuses on topics such as the characteristics of the current international and domestic situation, higher education reformation, and university development. It introduces current hot events in politics, economics, culture, science and technology, education, legal system, art, diplomacy, military, and academic research at home and abroad, and introduces analysis of the causes, changes, and effects of these events. This course will be taught in the form of lecture series.

CHI1203 MORALITY AND FOUNDATIONS OF LAW

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the core value of Chinese socialism. The objectives of the course are to help students: 1) answer a variety of queries relevant to political, ideological, and judicial issues, promoting the dissemination of Chinese patriotism and implementing education on view of life, value, ethics, morality, law, and world outlook; 2) explore the truth and improve comprehensive understandings of the world, society, and individual life; and 3) eventually achieve the goal of self-cultivation in thoughts, ethics, and law.

CHI1253 CONTEMPORARY CHINESE SOCIETY AND THOUGHT II

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help students understand Xi Jinping thought on socialism with Chinese characteristics. Starting with the context of the localization of Marxism in China, this course focuses on new developments of socialist theories in the new era under the leadership of Xi Jinping. It also aims to enrich students' understanding of the basic theories, fundamental policies, and general plans insisted on by the Chinese Communist Party in the new era, and to improve students' abilities to analyze and solve practical problems.

CHI1273 UNDERSTANDING CHINA

(2 units)

Pre-requisite(s): This is a course specifically designed for international students who are unable to participate in Military Training.

Course Description: This course aims at providing international students with a comprehensive understanding of China, covering various aspects including language, literature, history, philosophy, arts, music, film, sports, environment, community, and contemporary issues. Through interactive lectures, cultural immersions, and field trips, students will explore China's extensive history, rich heritage, captivating arts, dynamic society, and global influence. By the end of the course, students will develop a solid foundation in China's history, culture, and society, and will gain a deeper appreciation and knowledge of China's past, present, and global role.

COMM1023 FUNDAMENTALS OF COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to provide an introduction to the basic concepts, processes and contexts in the study of communication. The course explains listening, perceiving, using verbal and nonverbal communication, and establishing climate. Then these processes are applied to various contexts such as interpersonal, small group, public, organizational, intercultural, mass communication, personal, and social media. Students will acquire the knowledge of communication concepts and processes and establish the link between fundamental concepts and various communication phenomena and contexts. The course eventually discusses the practices of communication in various areas, namely, journalism, public relations and advertising, cinema and television, and media arts and design, and the challenges and opportunities in the era of new media.

COMM2003 COMMUNICATION THEORY

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introduction to theories and analytical frameworks essential for recognizing, explaining and evaluating developments in communication. The course takes a topical perspective that situates communication theories within communication paradigms, traditions, and contexts to further explore the connection to cultural, social, political and economic changes. The theories and frameworks also provide ways to comprehend everyday interactions with media at the individual level.

COMM2033 PERSUASION AND SOCIAL INFLUENCE

(3 units)

Pre-requisite(s): None

Course Description: The course aims to introduce students to the study of persuasion by considering a broad range of topics, from Aristotle's Rhetoric to Elaboration Likelihood Model and other more contemporary theories. Special emphasis is placed on the changing nature of persuasion as the process of communication is influenced by new media technology. Students first study the theoretical background of persuasion and then learn to recognise persuasive tactics and analyse them using the theories. Special attention is paid to strategies employed in present day persuasive messages through a variety of media – including radio, television, online social media, etc.

COMM2043 INTRODUCTION TO VISUAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with the practical knowledge and critical skills necessary to effectively consider visual design an essential and inevitable component of their work as public relations and advertising practitioners. Upon completion of the course, students should be able to identify the role of visual messages and apply related concepts to their analysis.

COMM3003 COMMUNICATION RESEARCH

(3 units)

Pre-requisite(s): COMM2003 COMMUNICATION THEORY

Course Description: This class introduces the student to the issues and processes involved in designing, conducting, and interpreting communication research. This course will focus on a range of communication research techniques, with special emphasis on statistical concepts and basic statistical methods.

COMM3013 INTRODUCTION TO FASHION COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course examines the intersection between fashion, media and culture in contemporary society that equips students with knowledge to explore how fashion is communicated to a global audience using various media. Areas in fashion communication include fashion advertising and public relations, fashion photography and visual merchandising, fashion journalism and social media. Theories of fashion and approaches in fashion communication in a globalized media-scape including an East Asia perspective will be discussed in social and professional context.

COMM3023 ORGANIZATIONAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course primarily focuses on the intricate dynamics of internal communication processes within organizations. Students will explore the intricate relationships between organizational objectives, design, culture, and their resulting impacts.

COMM3033 SOCIAL MEDIA COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course spans the essential aspects of social media communication from theories and practices to research methods and analytics, and aims to empower students with comprehensive and in-depth knowledge in social media communication. The key learning objectives of social media communication course include understanding the advanced theories and practices of social media, examining various social media strategies, exploring the saturation of social media and its impacts on social structures, and using social media as effective tools for both data collection and analytics. This course also helps build a solid foundation for students who are interested in conducting social media communication research for academic or professional purposes.

COMM3043 PUBLIC AFFAIRS AND COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a comprehensive understanding of the role and significance of communication in the public affairs and political sphere. By exploring various theories, strategies, and practices, students will develop critical insights into how communication shapes public opinion, influences political behavior, and impacts decision-making processes within various societies.

COMM3053 HEALTH AND SCIENCE COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a comprehensive understanding of health and science communication, focusing on the production and dissemination of information, persuasion techniques, and motivational strategies crucial for influencing health literacy and outcomes among the general public. Encompassing a wide spectrum of communication contexts, various mediated channels, and the utilization of diverse media technologies, this course explores the impact of messages originating from interpersonal, organizational, cultural, and media sources on health beliefs and behaviors, as well as public understanding of science. Specifically, this course will cover a myriad of health and science communication topics, helping the students gain insight into prominent theoretical frameworks, conduct analysis of strategies for framing health issues, and develop abilities to craft health messages and design health promotion campaigns. Upon completion of the course, students will demonstrate the capacity to apply theoretical constructs and critically examine different health and science communication scenarios.

COMM3063 TRANS-EDITING FOR JOURNALISM AND PUBLIC RELATIONS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with skills in strategic translation and trans-editing of journalistic and public relations content between Chinese and English in a multimedia, globalized, and AI-integrated media landscape. The course introduces the application of translation theories, principles, and strategies in the media industry, explores the potentials and limitations of AI-generated translation, and highlights the value of human translators' input in achieving accurate, customary, culturally sensitive, and impactful communication across linguistic barriers. It emphasizes the role of trans-editing as a more creative adaptation to make content culturally relevant and engaging for target audiences.

COMM3073 ADVANCED QUALITATIVE RESEARCH IN COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces advanced methods for qualitative social science research methods for communication scholars. Students will learn the in-depth theories and knowledge of communication research methods, evaluate the design of communication research, and conduct research projects with deliberately planned procedures and measures.

COMM3083 ADVANCED QUANTITATIVE RESEARCH IN COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course equips students with the essential knowledge and practical skills required to design quantitative research and analyze quantitative data in communication studies. Students will explore foundational principles of quantitative research, key statistical concepts, and their applications, supplemented by hands-on training in SPSS. Throughout the course, students will develop proficiency in constructing a robust quantitative research framework, managing and processing quantitative datasets, and conducting rigorous analytical interpretation. By the end of the course, students will be able to critically assess quantitative studies, select and apply appropriate methods and analytical techniques, systematically analyze quantitative data, and present results in alignment with scholarly standards in communication studies.

COMM3093 MEDIA AND MENTAL HEALTH

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to explore the complex relationship between media and mental health, examining how media influences public perceptions, stigma, and awareness of mental health issues. The course seeks to equip students with the knowledge and skills to critically analyze media representations of mental health and to promote responsible, ethical, and inclusive media practices in reporting on mental health topics. By the end of the course, students should be able to critically engage with media content related to mental health, contribute to destigmatizing mental health conditions, and advocate for more responsible and inclusive media practices.

COMM3103 MUSIC AS COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course explores the extent to which music—often termed the "universal language of emotion"—can be conceptualized as a form of communication. Utilizing a tripartite communication model that views communication as a synthesis of the selections of information, message, and understanding, the

course rigorously examines a wide range of musical forms, from classical music to K-pop, as well as various literary texts, trying to determine whether music conveys information that the listener can "understand" and how texts relate to music. Additionally, it investigates the social function of music, asking: What social problem does music address or solve? Students will be equipped with the knowledge and analytical skills necessary to examine forms of communication that extend beyond language and images, thereby addressing a critical gap in Media and Communication Studies. The course also offers a comprehensive history of musical evolution, with particular emphasis on East Asia.

COMM3113 SUSTAINABILITY AND COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: The objectives of this course include: 1) to understand the fundamentals of sustainability, as well as the central roles played by media and communication in the achievement of environmental, social and economic sustainability on a global scale; 2) to develop the competences to adequately interpret and evaluate information, media content, and discourses about sustainability; 3) to learn different approaches to medialise sustainability leading to different formats of communication outputs such as textual writing (storytelling and narratives), journalistic reports, documentary films, advertisements, ESG or CSR reports, PR events, photography, visual illustrations, infographics, etc.; and 4) to develop the awareness of opportunities in a career or postgraduate study concerning sustainability communication and ESG.

COMM4003 UNVEILING TOMORROW'S MEDIA: CHALLENGES AND TOOLS IN COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are (1) To acquire in-depth knowledge and training on important topics and cutting-edge developments in Media, Communication and Journalism. (2) To actively participate in a major Media forum where current issues and research developments are presented and discussed by distinguished international scholars. (3) To gain access to an active international academic and practitioner community dedicated to innovative learning approaches. (4) To acquaint students with basic types, features and production conditions of contemporary electronic media contents.

COMP1003 COMPUTER ORGANISATION

(3 units)

Pre-requisite(s): None

Course Description: An introduction to the building blocks and organisation of modern digital computers. The course answers the question: How does a computer work? Topics include: historical development of computing and the von Neumann model; data representation in computer systems; Boolean algebra, digital logic and its application to understanding Central Processing Unit (CPU) organisation; combinational and sequential circuits; Finite State Machine (FSM); Instruction Set Architecture (ISA); Assembly Language Programming; other basic modules, such as cache memory, virtual memory, and input/output techniques.

COMP1013 STRUCTURED PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces a methodical approach to program development, starting from problem formulation and specification, through design of the solution, implementation, and documentation, to evaluation of the solution. The subject matter is taught through a high-level structured programming language. At present, C is used.

COMP1023 FOUNDATIONS OF C PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with basic knowledge of computer-oriented problem solving methodologies, algorithm development, structured programming concepts and design techniques, and implementation tools that facilitate debugging and testing. In particular, structured programming skills will be illustrated with a contemporary programming language.

COMP1033 SYSTEMS AND WEB DEVELOPMENT WORKSHOP

(3 units)

Pre-requisite(s): COMP1023 FOUNDATIONS OF C PROGRAMMING

Course Description: The aim of this workshop is to introduce the basic concepts in system programming and web programming. This includes practical hands-on experience on programming in the frontend client side, as well as the backend server side.

COMP2003 DATA STRUCTURES AND ALGORITHMS

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or COMP1023 FOUNDATIONS OF C PROGRAMMING or COMP2013 OBJECT-ORIENTED PROGRAMMING or STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: This course develops students' knowledge of data structures and their associated algorithms. It introduces the concepts and techniques of structuring and operating on Abstract Data Types in problem solving. Common sorting, searching and graph algorithms will be discussed, and their complexity studied.

COMP2013 OBJECT-ORIENTED PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces object-oriented programming concepts, principles, and techniques, including classes, objects, inheritance, and polymorphism. All these concepts are illustrated using a contemporary object-oriented programming language. Upon completion, students should be able to use an object-oriented language to develop complex programmes.

COMP2023 SOFTWARE DEVELOPMENT WORKSHOP I

(1 unit)

Pre-requisite(s): GCIT1003 IT FOR SUCCESS OF EVERYDAY LIFE AND WORK or
GCIT1013 FOUNDATIONS OF C PROGRAMMING or
GCIT1023 PYTHON PROGRAMMING FOR BEGINNERS

Course Description: This workshop introduces the basic concepts in network and server administration. Practical, hands-on experience of server administration will be emphasised.

COMP2073 DATA PROGRAMMING WORKSHOP

(3 units)

Pre-requisite(s): COMP1023 FOUNDATIONS OF C PROGRAMMING, and COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This workshop aims to have the students learn independent design, research, and coding on data analysis. It will help the students understand the concept of data analysis process. By processing data, students will learn how to collect data, clean data, process and visualize data. One or two programming languages will be introduced during the course. They could be Python, or any other new technologies.

COMP3003 DATA COMMUNICATIONS AND NETWORKING

(3 units)

Pre-requisite(s): COMP1003 COMPUTER ORGANISATION

Course Description: Students will learn the principles of data communications, computer networks and network programming. Topics include: Network hardware and software, Network topologies and categories, Reference models and standards, Physical layer: signal analysis, bandwidth and data rate, transmission media, encoding, transmission, Data link layer, Network layer, Ethernet, Fast Ethernet, Gigabit Ethernet, Wi-Fi, TCP/IP, Socket programming, Client and Server software.

COMP3013 DATABASE MANAGEMENT SYSTEMS

(3 units)

Pre-requisite(s): COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP2013 OBJECT-ORIENTED PROGRAMMING or
COMP3153 C++PROGRAMMING LANGUAGE

Course Description: This course introduces how to represent the data in a database for a given application and how to manage and use a database management system. Topics include: conceptual modelling of a database, relational data model, relational algebra, database language SQL, relation database design, and emerging XML data models. In addition, hands-on DBMS experience is included.

COMP3023 DESIGN AND ANALYSIS OF ALGORITHMS

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURES AND ALGORITHMS or
AI2003 DATA STRUCTURES AND ALGORITHM ANALYSIS or
COMP3143 DATA STRUCTURE (FOR FM STUDENTS) or
COMP3283 DATA STRUCTURE

Course Description: This course builds on the study of the analysis and implementation of algorithms and data structures (COMP2003). The goal is to introduce a number of important algorithms that are interesting both from a practical and theoretical point of view. Algorithm design paradigms such as divide-and-conquer and dynamic programming will be discussed, and algorithms for sorting, searching, and graph problems, etc. will be developed.

COMP3033 OPERATING SYSTEMS

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or
COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP2013 OBJECT-ORIENTED PROGRAMMING or
STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or
COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: Introduces the fundamentals of operating system design and implementation. Topics include an overview of the components of an operating system, mutual exclusion and synchronisation, deadlocks and starvation, implementation of processes and threads, resource scheduling algorithms, memory management, and file systems.

COMP3043 SOFTWARE DEVELOPMENT WORKSHOP II

(1 unit)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING

Course Description: This workshop introduces the latest multimedia software tools, and advanced network administration. Practical, hands-on experience of multimedia software tools and network administration will be emphasised.

COMP3053 SOFTWARE DEVELOPMENT WORKSHOP III

(1 unit)

Pre-requisite(s): COMP3013 DATABASE MANAGEMENT SYSTEMS

Course Description: This workshop introduces the state-of-the-art technologies in Web applications, and enhances practical, hands-on experience of Web programming.

COMP3063 SOFTWARE ENGINEERING

(3 units)

Pre-requisite(s): COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course discusses the principles and practical aspects of software development. It studies the

methodology of software development as well as the organisation, planning and management of the development process so that students will appreciate the difficulties involved in a large system development project and the importance of a disciplined approach to the problem.

COMP3073 INTRODUCTION TO ROBOTICS

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING
or
COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP2003 DATA STRUCTURES AND ALGORITHMS

Course Description: This course aims to introduce students to the concepts involved with autonomous robotic systems. The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots.

COMP3083 NUMERICAL COMPUTATION

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA

Course Description: This course aims to introduce students to the concepts involved with numerical calculations on computing devices. The objective of this course is to discuss and analyse mathematical principles and algorithms used to solve a variety of problems that arise in disciplines such as the natural and social sciences, and engineering.

COMP3103 DESIGN PATTERNS

(3 units)

Pre-requisite(s): COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course introduces popular design patterns that can be used in software development.

COMP3123 SOFTWARE TESTING

(3 units)

Pre-requisite(s): COMP3063 SOFTWARE ENGINEERING

Course Description: This course teaches students different kinds of testing strategies and how to develop or evaluate tools to automate software testing.

COMP3143 DATA STRUCTURE (FOR FM STUDENTS)

(3 units)

Pre-requisite(s): COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: This course aims to develop the students' knowledge in data structures and the associated algorithms; to introduce the concepts and techniques of structuring and operating on Abstract Data Types in problem solving; to discuss common sorting, searching and graph algorithms, and to study the complexity and comparisons among these various techniques.

COMP3153 C++ PROGRAMMING LANGUAGE

(3 units)

Pre-requisite(s): None

Course Description: This course introduces object-oriented programming concepts, principles, and techniques using the C++ programming language. Students will learn how to create C++ programmes using control statements, functions, structures, memory management, pointers, classes, inheritance, and polymorphism. Students will also learn how to use tools to edit, compile, debug, and test C++ programmes.

COMP3163 MOBILE APPLICATION DEVELOPMENT

(3 units)

Pre-requisite(s): COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course is designed to introduce and familiarise participants with programming in the Android environment. Students will learn skills for creating and deploying Android applications, with particular emphasis on software engineering topics including software architecture, software process, usability, and deployment. Hands on experience in the form of exercises are included throughout the course to reinforce material that has been presented in lecture form.

COMP3173 COMPILER CONSTRUCTION

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING
or
COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP2013 OBJECT-ORIENTED PROGRAMMING or
STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or
COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: This course introduces the concepts that underline most of the programming languages students are likely to encounter, and illustrates those concepts with examples from various languages. Topics include syntax and semantic analysis, bindings, type systems, programming paradigms, control abstraction and flow.

COMP3183 FINANCIAL COMPUTING

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING
or
COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course aims to introduce students to the principles of computational finance and financial data analysis. The objective of this course is to explore various relations between computer science and finance.

COMP3193 CLOUD COMPUTING

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING
or
COMP1023 FOUNDATIONS OF C PROGRAMMING, and
COMP3033 OPERATING SYSTEMS

Course Description: This course introduces an overview of the field of Cloud Computing, its enabling technologies, main building

blocks of cloud computing systems and its application. This course will cover the topics of cloud infrastructures, virtualization, software defined networks and storage, cloud storage, and programming models. Also, hands-on experience through projects utilizing cloud infrastructures (provided by campus datacentres or public cloud services) will be provided.

COMP3203 INTRODUCTION TO MACHINE LEARNING

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or COMP2013 OBJECT-ORIENTED PROGRAMMING or COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: The course gives an introduction to machine learning and its applications. The aim of the course is to provide the students the basic ideas and intuition about machine learning algorithms as well as its implementation and application.

COMP3213 INTERNET OF THINGS

(3 units)

Pre-requisite(s): None

Course Description: This course introduces various challenges and opportunities in the Internet of things. We discuss topics such as perception and recognitions, RFID and NFC, wireless sensor networks, storage of IoTs, security/privacy of IoTs, and applications. Concepts and state-of-art progress on crowd sensing, passive sensing, and sensor-cloud are also covered.

COMP3223 MOBILE COMPUTING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces various challenges and opportunities in mobile computing. We discuss topics such as wireless communication, network protocols and standards, ad-hoc networks, location awareness, sensing, application development. Concepts and state-of-art progress in edge computing are also covered as part of the computational model.

COMP3233 VIDEO GAME PROGRAMMING

(3 units)

Pre-requisite(s): COMP1023 FOUNDATION OF C PROGRAMMING or COMP1013 STRUCTURED PROGRAMMING or COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course introduces the commonly used techniques in the game industry today. The topics include the core game system, math for games, 3D graphics, simple AI for games, and game implementation in C++.

COMP3253 ADVANCED SOFTWARE DEVELOPMENT WORKSHOP

(3 units)

Pre-requisite(s): COMP2013 OBJECTED-ORIENTED PROGRAMMING, and COMP3013 DATABASE MANAGEMENT SYSTEMS

Course Description: This workshop aims to help students have some practices in working as a software engineer via the development of a project. The course will also show students how to elicit and document specifications, design software architecture, test the implementation, communicate as a team, and use appropriate tools. The students are expected to be able to apply the software engineering principles and methods to software development.

COMP3263 INTELLIGENT INTERNET OF THINGS

(3 units)

Pre-requisite(s): None

Course Description: This course introduces various challenges and opportunities in the Intelligent Internet of things. We discuss topics such as perception and recognitions, RFID and NFC, wireless sensor networks, storage of IoTs, security/privacy of IoTs, and applications. Concepts and state-of-art progress on crowdsensing, passive sensing, and sensor-cloud are also covered.

COMP3273 5G NETWORKS AND MOBILE COMPUTING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces various challenges and opportunities in 5G Networks and mobile computing. We discuss topics such as wireless communication, 5G Networks, network protocols and standards, ad-hoc networks, location awareness, sensing, application development. Concepts and state-of-art progress in edge computing are also covered as part of the computational model.

COMP3283 DATA STRUCTURE

(3 units)

Pre-requisite(s): COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: This course aims to develop the students' knowledge in data structures and the associated algorithms; to introduce the concepts and techniques of structuring and operating on Abstract Data Types in problem solving; to discuss common sorting, searching and graph algorithms, and to study the complexity and comparisons among these various techniques.

COMP4003 THEORY OF COMPUTATION

(3 units)

Pre-requisite(s): MATH2003 DISCRETE STRUCTURES

Course Description: This course aims to introduce the fundamental concepts in theoretical computer science. Topics include deterministic and non-deterministic finite automata, regular languages, context-free languages, Turing machines, Church's thesis, the halting problem, computability, and complexity. Also, the formal relationships between machines, languages and grammars are addressed.

COMP4004 FINAL YEAR PROJECT I (COMP)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing in Computer Science and Technology Programme

Course Description: Students will undertake an individual project under the supervision of a faculty member and gain the practical experience of applying computer systems principles and techniques acquired from the course to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project. This course is open to Computer Science majors only.

COMP4005 FINAL YEAR PROJECT II (COMP)

(3 units)

Pre-requisite(s): COMP4004 FINAL YEAR PROJECT I (COMP)

Other Condition(s): Year 4 standing in Computer Science and Technology Programme

Course Description: Students will undertake an individual project under the supervision of a faculty member and gain the practical experience of applying computer systems principles and techniques acquired from the course to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project. This course is open to Computer Science majors only.

COMP4023 COMPUTER AND NETWORK SECURITY

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the fundamental concepts and techniques in computer and network security. Topics include basic encryption techniques, cryptographic algorithms, authentication and digital signature, public key infrastructure, access control, security models, as well as their applications to, for example, IP security, Web security, and trusted operating systems. In addition, it discusses other system and programming related security issues, including non-malicious errors, computer viruses, and intrusion detection.

COMP4033 COMPUTER GRAPHICS

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURE AND ALGORITHMS, and
MATH1003 LINEAR ALGEBRA

Course Description: This course introduces graphics hardware architectures and systems, 2D geometric primitives, geometric Transformations, 3D graphics, 3D object representations, rendering and implementation algorithms, curves and surfaces, animation, etc.

COMP4043 DATA MINING AND KNOWLEDGE DISCOVERY

(3 units)

Pre-requisite(s): AI1023 DATABASE MANAGEMENT SYSTEMS or
COMP3013 DATABASE MANAGEMENT SYSTEMS or
EBIS3003 DATABASE MANAGEMENT

Course Description: This course provides an overview of the concepts and techniques in knowledge discovery and data mining. The students are expected to have some ideas about some basic knowledge discovery and data mining techniques, including classification, clustering, data association and data warehouse.

COMP4053 DATABASE SYSTEM IMPLEMENTATION

(3 units)

Pre-requisite(s): COMP3013 DATABASE MANAGEMENT SYSTEMS or
DS2003 FUNDAMENTALS OF DATABASE SYSTEMS

Course Description: This course provides students with an in-depth knowledge of relational database management systems (DBMS). Topics include data storage, index structures, query evaluation, transaction processing, concurrency control, and crash recovery. In addition, advanced topics such as distributed databases and data warehouses will also be covered.

COMP4063 DIGITAL MEDIA COMPUTING

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or
COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course introduces the basic properties of different types of digital media in the multimedia systems, namely audio, image, and video. As data compression is the most important enabling technology, making modern multimedia systems possible, data compression algorithms and the international standards of these digital media will be discussed.

COMP4073 DISTRIBUTED COMPUTING SYSTEMS

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the needs, key concepts, and techniques underlying the design and engineering of distributed computing systems. The discussions will focus on communications, synchronisation and concurrency control, process management, distributed file services, and case studies. Also included will be an introduction to clustering computing and parallel algorithms.

COMP4083 E-TECHNOLOGY ARCHITECTURES, TOOLS AND APPLICATIONS

(3 units)

Pre-requisite(s): None

Course Description: This course develops students' knowledge in emerging e-technologies, including related architectures, tools, and applications. In particular, it introduces the Web from three different aspects: (1) Web as distributed databases; (2) Web as distributed computing platforms; and (3) Web as social networks. It discusses the use of e-technologies in different application domains, including e-business, e-learning, etc.

COMP4093 INTERNET AND THE WORLD WIDE WEB

(3 units)

Pre-requisite(s): COMP3003 DATA COMMUNICATIONS AND NETWORKING

Course Description: Students will learn the principles of the Internet and the World Wide Web, and study some applications and current topics.

COMP4103 ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

(3 units)

Pre-requisite(s): COMP3013 DATABASE MANAGEMENT SYSTEMS

Course Description: This course presents the principles and fundamental techniques of artificial intelligence, particularly in the field of machine learning. Students not only learn the fundamentals and state-of-the-art techniques, but also acquire some practical insights into the current development of this field.

COMP4113 COMPUTER VISION AND PATTERN RECOGNITION

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURES AND ALGORITHMS, and
MATH1003 LINEAR ALGEBRA

Course Description: This course covers basic concepts in computer vision and pattern recognition. Topics include image sensing and camera perception, 2D image analysis such as filters, edge detection and Hough transform, pattern classification, physics-based vision, stereo and motion, and solid model recognition. It concludes with current trends and challenges in computer vision and pattern recognition.

COMP4123 INFORMATION RETRIEVAL AND SEARCH ENGINE

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURES AND ALGORITHMS

Course Description: This course introduces the basic principles of information retrieval and search engines. Advanced models and techniques in information processing and retrieval will be covered.

COMP4133 SYSTEM ANALYSIS AND DESIGN

(3 units)

Pre-requisite(s): COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: This course introduces the concepts and methods of system analysis and design to students with little or no experience. It provides understanding of the entire process of information system design. Topics include business event analysis, use cases, system sequence diagrams, domain modelling and the latest systems development methods, tools and techniques.

COMP4143 INTRODUCTION TO WEB INTELLIGENCE

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the fundamental concepts and practical applications of contemporary Artificial Intelligence (e.g., incorporating knowledge discovery and data mining, intelligent agents, and social network intelligence) and advanced Information Technology (e.g., involving wireless networks, ubiquitous devices, social networks, and data/knowledge grids) in the context of Web-empowered systems, environments, and activities. In addition, it discusses the techniques and issues central to the development of Web Intelligence (WI) computing systems.

COMP4153 QUANTUM FINANCE AND INTELLIGENT FINANCIAL TRADING SYSTEMS

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING
or
COMP1023 FOUNDATIONS OF C PROGRAMMING or
AI1013 OBJECT-ORIENTED PROGRAMMING
or
COMP2013 OBJECT-ORIENTED PROGRAMMING or
STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS) or
COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: With the exponential growth of program trading in worldwide financial industry, Quantum Finance and its underlying technologies including quantum field theory and chaos theory become one of the hottest topics in the Fintech community. Many worldwide financial institutions and fund houses have the needs to recruit computer professionals with basic knowledge on quantum finance to develop intelligent financial systems. The objective of this course is to teach students the basic knowledge of quantum finance and its underlying theories and technologies including quantum field theory, chaos theory and chaotic neural networks and how to apply these technologies to finance industry to develop intelligent financial prediction and trading systems.

COMP4163 NEURAL NETWORKS AND DEEP LEARNING

(3 units)

Pre-requisite(s): COMP3013 DATABASE MANAGEMENT SYSTEMS

Course Description: This course presents the principles and applications of Neural Network and Deep Learning, which is a branch of Artificial Intelligence. This course focuses on the use of deep neural network and big data, the applications of which are changing the way we live in our modern world. Students will learn about fundamental concepts as well as state-of-the-art tools and techniques.

COMP4173 DIGITAL IMAGE PROCESSING

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA or
MATH1053 LINEAR ALGEBRA I

Course Description: This course provides fundamentals of digital images processing including basic image operations in both spatial and frequency domains, image restoration, morphological image processing, image segmentation and applications, human visual system and colour image processing.

COMP4183 GAME ENGINE DESIGN

(3 units)

Pre-requisite(s): COMP1023 FOUNDATIONS OF C PROGRAMMING or
COMP1013 STRUCTURED PROGRAMMING, and COMP3033 OPERATING SYSTEMS

Course Description: Game engines are the essential tools for video game productions. The performance of game engines directly decides how fast games can be implemented and how well games can be optimized. This course intends to introduce the fundamental features of a game engine. After taking this course, students are expected to have enough skills to implement a game engine prototype.

COMP4193 MULTIPLAYER GAMES AND ACCESSORIES

(3 units)

Pre-requisite(s): COMP2013 Object-Oriented Programming

Course Description: This course introduces the basic techniques to implement multiplayer games and also the most popular game accessories, for example VR/AR devices, somatosensory systems and RGBD cameras. These advanced features of games can greatly enhance player's gaming experience. Students will learn programming these devices in Unity and deploy some applications to Android systems.

COMP4203 LINEAR SYSTEMS

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA or
MATH1053 LINEAR ALGEBRA I or
MATH1173 LINEAR ALGEBRA

Course Description: The aim is to develop solid understanding of the fundamentals of linear systems analysis and design. The focus will be on state space approach though frequency domain techniques and relation between two methods are also covered to some extent.

COMP4213 WIRELESS COMMUNICATION AND MOBILE COMPUTING

(3 units)

Pre-requisite(s): COMP3003 DATA COMMUNICATIONS AND NETWORKING or
COMP3033 OPERATING SYSTEMS

Course Description: This course introduces various challenges and opportunities in mobile computing. We discuss topics such as wireless communication, network protocols and standards, ad- hoc networks, location awareness, sensing, application development. Concepts and state-of-art progress in edge computing are also covered as part of the computational model.

COMP4223 DEEP LEARNING FOR COMPUTER VISION

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURES AND ALGORITHMS, and
MATH1003 LINEAR ALGEBRA

Course Description: This course covers fundamental and advanced domains in computer vision,covering topics from early vision to mid- and high-level vision. Topics include image sensing and camera perception, 2D image analysis such as filters, machine learning and convolutional neural networks, object detection and image segmentation, image synthesis, 3D scene tasks. Students will learn the essential mathematical foundation and algorithms of computer vision, and the methods of implementing these algorithms. Students will also gain practical experience on these topics by using Python.

COMP4233 FUNCTIONAL PROGRAMMING

(3 units)

Pre-requisite(s): COMP1023 FOUNDATIONS OF C PROGRAMMING

Course Description: This course aims to fully introduce the concepts of functional programming, including recursions, higher-order programming, functional data structures and algorithms, basic lambda calculus, and type theory. This course also provides many lab exercises to let students experience programming in one specific functional programming language. Furthermore, this course can open a door to the theory of programming language, combinator logic, and type theory for the students who plan to pursue a postgraduate degree in a related program.

COMP4243 MATHEMATICAL AND COMPUTING METHODS

(3 units)

Pre-requisite(s): MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING or
MATH1073 CALCULUS I or
MATH1103 CALCULUS

Course Description: This course introduces mathematical and computing methods in the study and research on computer science and artificial intelligence, including theories and applications of multivariable calculus, vector calculus, variational calculus, and optimization. The topics covered serve as the foundations of many advanced studies. Upon successful completion of the course, students should be able to learn and apply mathematical theory and methods to practical optimization problems, formulate mathematical models for real problems and obtain numerical solutions for the models.

COMP4253 AI-GENERATED CONTENT

(3 units)

Pre-requisite(s): AI3003 NEURAL NETWORKS AND DEEP LEARNING or
AI3013 MACHINE LEARNING or
DS4013 MACHINE LEARNING

Course Description: This course aims to comprehensively introduce the concepts of AI-Generated Content (AIGC) and generative modeling, including foundational models such as large language models (LLMs), diffusion models, and generative adversarial networks (GANs). It will explore the latest technologies used in AIGC, examining their applications across various fields like media, marketing, and creative industries. Additionally, the course will address the practical challenges associated with AIGC, preparing students to critically analyze and implement these technologies in real-world scenarios. Through hands-on lab sessions, students will gain practical experience in generating their own AI-driven content, equipping them with the skills necessary for careers in the rapidly evolving landscape of digital media and artificial intelligence.

COMP4263 3D COMPUTER VISION

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURES AND ALGORITHMS, and
MATH1003 LINEAR ALGEBRA

Course Description: This course introduces fundamental and advanced domains in 3D computer vision, covering topics from single, stereo, multiple view geometry to learning 3D from images or videos. Topics include camera models, 3D representations, perspective geometry, camera calibration, shape from X, learning depth, objects or human, volume rendering, nerf, 3DGS, generative 3D modeling, etc. Students will learn the essential mathematical foundation and algorithms of 3D computer vision, and the methods of implementing these algorithms. Students will also gain practical experience on these topics by using Python and OpenCV.

CTV1003 INTRODUCTION TO ELECTRONIC MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course serves as an introduction to the structural, historical, and social aspects of electronic media, with a particular focus on broadcast and new media. It delivers knowledge about the history, role, and change within the television, cable, home video, and satellite industries as well as information about today's internet and new media technologies. Finally, it will examine the convergence of digital and new media as well as its effect and governance of electronic and new media.

CTV1013 INTRODUCTION TO MEDIA AESTHETICS

(3 units)

Pre-requisite(s): None

Course Description: The main objective of this introductory course is to enhance awareness of the aesthetic choices made in visual media production and to explore how the tools and techniques used in its creation can be joined to generate a variety of meanings and messages. The course will involve practicing detailed analysis of the aesthetic choices made in different forms of visual media, with particular emphasis given to narrative film and television. Some practical exercises will also be given to deepen understanding of aesthetic principles.

CTV1023 FILM HISTORY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help the students establish a general framework to understand the establishment of the film medium in various countries from its beginnings in the late 19th century to the present. While various international developments will be explored, the course will focus primarily on developments in American and Europe. An overview of film history in China will also be included.

CTV2003 AESTHETICS OF FILM

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce the differing perspectives on the cinema through a consideration of the concept of aesthetics. The specific objective of the course is to survey the aesthetic elements of moving image production and to demonstrate how these elements link together to create differing aesthetic forms. Furthermore, the course aims to: enhance student interest in and knowledge about the development and production processes of the cinema; offers multiple ways to situate, enlarge, and enrich knowledge and experience of film; develops critical thinking as students learn about film theory and become more visually literate.

CTV2013 PRINCIPLES OF PHOTO IMAGING

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are:

1) To foster an appreciation of contemporary photo imaging forms and concepts through a practical, analytical and critical approach.
2) To introduce practical knowledge of photo-imaging and techniques of visual presentation along with photographic language and visual theories.
3) To develop students' knowledge, skills and understanding through the making of photographs and digital images that lead to and demonstrate conceptual and technical accomplishment.
4) To develop students' knowledge, skills and understanding that lead to increasingly accomplished critical and historical investigations of photography and digital imaging.

CTV2023 SCRIPTWRITING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the creative processes of screenwriting. Through practical exercises and assignments students will learn about the art, craft, and business of film and television writing, with a primary focus on writing for short films and writing for television.

CTV2033 COMMUNICATION RESEARCH METHODS

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the student to the issues and processes involved in designing, conducting, and interpreting communication research. It will focus on a range of communication research techniques commonly used in the Humanities and Social Sciences to gather, analyse, and interpret data relating to film, television and new media. The class is designed to help the student understand the benefits and limitations of research. This includes the proper use and interpretation of research results. The goal of the course is to educate the student in the benefits and limitations of research used by professionals in the mass media with an emphasis on the film, television, and new media industries. This should allow the student to accurately and appropriately use research to further develop his or her career.

CTV2053 VIDEO CINEMATOGRAPHY

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are:

1) To cover the fundamental theory and practice of cinematography and lighting for film and video production.
2) To introduce basic and advanced digital video cinematography techniques for both studio and field.
3) To learn and use the language of cinema and television, such as shot sizes, composition, camera movements, audio, and lighting.

4) To work in group project which provides each student with professional team-work skills that can be applied to all aspects of the professional world.

CTV2063 FILM AND TELEVISION DIRECTING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to continue the exploration of the many expressive combinations possible through the manipulation of narrative, mise-en-scene, cinematography, editing and sound, and the role the director of fiction-based media has in guiding these choices. This exploration is done primarily in two ways:

1) The analysis and evaluation of aesthetic choices made by professional directors in existing motion pictures
2) The application of aesthetic understanding in the creation of an original digital film. The course will also prepare students to organise and manage the creation of a short narrative digital film.

CTV2073 INTRODUCTION TO COMMUNICATION THEORY

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are to explore a broad spectrum of theoretical development encompassing interpersonal, organisational, and mass communication theories. Application of the theories is an important component of the course, especially in making the ideas relevant to the context of the discipline of Cinema and Television within a communication framework. Equally, application drawing on personal experience is important in order to provide a foundation to meet the discipline of communication.

CTV2083 FUNDAMENTALS OF ACTING

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide an introduction to the basics of stage acting rooted in Stanislavski, Michael Chekov, Meyerhold, Grotowski and other great theatre performance giants. The course combines the systematic theoretical knowledge with concrete practical technique. Students will gain basic skills in acting, and will learn working vocabulary and terms in theatre, film, TV and other art and non-art performing circumstances, while studying the basic theoretical literature of the discipline. Students will develop an understanding of, and appreciation for, the craft of acting for above circumstances. Students will discover the person as a performer and gain confidence on stage through theatre games, exercises, monologues, and scene work. Students will develop the basic skill to work with professional and amateur actors as director. Students will also gain basic practical techniques of artist collaboration in terms of organizational and productive skills and communicate via group exercises, and prepare themselves to further investigate advanced knowledge and practical experience in following courses with different disciplinary concerns.

CTV2093 VISUAL MEDIA AND CHINESE SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on introducing students the interaction between visual media (traditional television, streaming media as well as other new forms of visual media) and Chinese society. Students will be guided to learn and investigate the role of visual media in the formation and maintenance of Chinese cultural identities, and its impact on other media and on the Asian Community. With the emergence of new technologies and new media, this course also highlights how Chinese TV embrace the new media landscape, for instance, the transformation of the traditional TV to the online streaming media, the emergence and popularity of short videos, and the immersive media (AR, VR and MR).Visual media discourses, and audience reception would be analyzed as well.

CTV3003 SOUND RECORDING AND MIXING

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to train students in the foundational practices of audio production, familiarise students with the basic elements and stages of audio production, and the concepts, skills and techniques of audio equipment and systems involved in the entire film and/or video production processes. During the course, demonstrations, equipment tutorials, hands-on workshops, in-class exercises and projects will be used to enhance student learning and acquisition of experience in sound design and production for the film and television industries.

CTV3013 DOCUMENTARY FILM PRODUCTION

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are:

1) To examine the development of non-fiction filmmaking by comparing current documentaries with those made earlier.
2) To illustrate how the art has responded to social, political, and economic realities and to changes in technology and systems of distribution.
3) To familiarise students with the whole process of making a documentary film.
4) To help students gain documentary production experience working individually and in groups.

CTV3023 FILM AND VIDEO EDITING

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are:

1) To provide an intensive technical introduction to the tools and techniques of the modern editor.
2) To introduce the fundamentals of film and video editing and the latest advances in electronic video post-production.
3) To develop students' editing eye through extensive lab and practical work.

CTV3033 ART DIRECTION AND PRODUCTION DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course aims to investigate the essential roles of the Art Director and Production Designer on a film or

television production. Students will gain a foundation in aesthetics and techniques of the Art Department and how the design of the sets, locations, costumes, and properties all contribute to narrative world-building. Alongside the theoretical lessons and surveys of the industry, they will apply this new knowledge and skill-set as first-time production designers for a common short film project.
Please note that most assignments will require both visual and written materials. While not required, some proficiency in studio arts and/or knowledge of creative software will be an asset.

CTV3043 CINEMA AND TELEVISION INTERNSHIP

(3 units)

Pre-requisite(s): None
Course Description: Objectives of the internship are to provide a direct link between the Programme's core values and the disciplines and methods of practice; to enable students to experience aspects of practice and provide the opportunity for them to work in areas of the field outside their specific expertise; to enable students to observe, analyse, and comment on the interaction between theoretical and practical issues of their programme as it is practised; and to establish connections between practice and the development of relevant directions.
The internship is intended to provide the opportunity for students to work in various situations in their Programme's area. The internship is also intends for students to use the opportunities of their placement to broaden their own experience beyond the limitations of their chosen discipline.

CTV3053 ADVANCED FILM SOUND AND MUSIC RECORDING AND MIXING

(3 units)

Pre-requisite(s): CTV3003 SOUND RECORDING AND MIXING
Course Description: This course will build upon basic sound recording and editing skills previously taught. Students will learn about major film composers and matching music to emotional content, while listening skills will be sharpened in order to recognize and analyse the techniques used in sound design both in relation to visual images and to the psychological and metaphorical uses of sound. Skills and techniques required for successful recording of dialog, Foley, effects, and backgrounds will be taught, while students discover the critical importance of dialog editing, and creation of sound design elements for film. Students will be encouraged to think critically and creatively as they appreciate the crucial importance of good sound for all films, TV, and media.

CTV3113 MOTION IMAGING COLOUR GRADING

(3 units)

Pre-requisite(s): CTV3023 FILM AND VIDEO EDITING
Course Description: This course This course is an introduction to the art, craft, and science of color grading, also known as color correction, color timing or digital color- correction. The course will explore various aspects of color grading and how it can enhance and improve storytelling. The objective is for students to gain a greater understanding of the intricacies and components of photographed images and how to reshape them using color grading techniques.

CTV3123 EXPERIMENTAL FILM

(3 units)

Pre-requisite(s): None
Course Description: This course will examine and engage students with experimental filmmaking. Students will participate in practical projects and written work that will explore some key approaches to experimental film and digital film practice, and the analysis of experimental film practitioners. They will conceive, plan, develop and edit a time-based work, and be encouraged to consider experimental approaches to develop their ideas in conjunction with tutorial support. Students will be exposed to a diverse range of experimental film and digital film practices through a series of screenings and discussions, which will inform the critical and theoretical backdrop to this course.

CTV3133 CINEMA AND FILM CULTURE IN THE DIGITAL ERA

(3 units)

Pre-requisite(s): None
Course Description: This module is designed to retool students thinking about cinema and film culture in the digital era. Having successfully complete this module, students will be able to demonstrate knowledge and understanding of: 1) the histories and theories of new and emerging media/film culture; 2) The globalised, converged, and conglomerated media landscape of the twenty-first century; 3) the impact of digital technologies and media innovation on film aesthetics and film culture; 4) the debates surrounding digital film culture. At the same time, students will develop and apply a critical vocabulary for examining film and media. They can move beyond textual analysis (a dominant model of researching films in academic film studies) and further consider audio-visual texts and film culture in terms of the internet infrastructure, social media platform and interface, digital circulation, and internet spectatorship.

CTV3143 THE CRAFT OF CONTEMPORARY STORYTELLING: COLLABORATIVE AND INTERACTIVE NARRATIVES

(3 units)

Pre-requisite(s): None
Course Description: This course immerses the student in the dynamic evolution of storytelling—from its ancient roots as collective expression to its contemporary form as a digital art. We explore the symbiotic relationship between human interaction, emotion, and narrative creation. How do these elements collaborate to shape worlds, fostering collaborative storytelling? Additionally, we examine how new media can shift participants from passive viewers to active contributors in the narrative.

CTV3153 CULTURAL AND MEDIA STUDIES

(3 units)

Pre-requisite(s): None
Course Description: In this course, students will learn about key concepts in cultural studies and media studies and adopt cultural studies as a research methodology for media analysis. Students will a) broaden their understanding of culture beyond objects to encompass social practices related to media,including media technology, regulation, production, distribution, consumption, and remix, and how media is related to politics, economics, technology, and social organization; b) describe how our understandings and evaluations of ourselves and others, individuals and communities are shaped by culture and media; c) examine the mechanisms of ideology in culture and media and analyse how power is ideologically maintained; and d) develop skills for critical research

and atransformative approach to knowledge, to foster ethics and social justice in media production and consumption.

CTV4013 PRODUCTION AND MEDIA MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course has two parts. Part 1 examines the roles and skills of a film producer, categories of productions and analyses the proper procedures for production management from initiation to completion. Part 2 focuses on how media organisations and production companies in various scales are managed.

Topics will include:

1) Challenges media organisations are facing
2) Techniques and processes used in managing a media company
3) Crisis management
4) Challenge of working in teams
5) Challenge of the new media

CTV4023 HISTORY AND AESTHETICS OF THE CHINESE CINEMA

(3 units)

Pre-requisite(s): None

Course Description: This course explores the expressive possibilities of Chinese cinema through the analysis of major aesthetic categories of narrative, mise-en-scene, cinematography, editing and sound. The course aims to provide students with the attitudes and skills required to judge and appraise Chinese films and write about the achievements of major films from an aesthetic and industrial perspective.

CTV4033 ON-LINE INTERACTIVE VIDEO

(3 units)

Pre-requisite(s): None

Course Description: The internet provides wonderful access to film/video makers of all kinds, enabling them to reach a vast potential audience cheaply and easily. This course explores concepts and structures of online communication, employing interactive digital media. A variety of tools and procedures will be employed. Students will learn the history and aesthetics of online media and use tools and techniques learned in class to create a well-designed, interactive web page to convey their idea and concept as well as produce a high-quality video to be distributed across the internet.

Topics like HTML, user interface, design, internet history, users' navigation habits, graphic processing, file transfers, internet access, and movie streaming will be covered. Emphases will be put on how to compress the movie without sacrificing playback speed and sharp, crisp detail, as well as incorporate interactive scripts to set up an interface that controls the movie clips through behaviour and action.

CTV4043 FILM MUSIC AND SOUND

(3 units)

Pre-requisite(s): None

Course Description: The objectives of this course are to enable the students to: 1. Acquire a comprehensive foundation in sound and music for film. 2. Develop listening skills in order to recognise and analyse the techniques used in music composition and sound design in relation to visual images. 3. Become familiar with the various types of music, sound effects, silence and dialogue and how it complements the plot in a film. 4. Become conversant enough in music and film terminology in order to participate in class discussions. 5. Develop an appreciation of the skills required for successful creation of music and sound for film.

CTV4053 DIGITAL ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the history, language, principles, aesthetics and digital tools used in the creation of animation within the context of art and design. The class will focus on understanding the development of animation, the mechanism of animation, and the techniques of animation sufficient to produce projects of merit.

Through different styles of animation, the class will explore the foundations of animation history and its characteristics. In addition, through the use of the 3D software Maya, this course will teach students how to complete basic digital animation.

CTV4063 STUDIES IN HOLLYWOOD CINEMA

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are:

1) To examine Hollywood as a reference point for all cinemas globally and historically;
2) To explore a set of conventions and practices developed in Hollywood cinema;
3) To study the Hollywood formula and certain important moments in Hollywood cinema and how they relate to American history.

CTV4073 SPECIAL TOPICS IN FILM AND TELEVISION STUDIES

(3 units)

Pre-requisite(s): None

Course Description: Different studies are designed to give students a range of current ideas and respond to new interests of the faculty. Some of the topics of the studies include: visualising stories, digital technology and innovation, the musical or the semiotics related to culture studies, entertainment marketing, creative process and creativity, gender studies, etc. The aims of this course are:

1) To enhance the knowledge and bring different perspectives on the selected topic in TV and Film area.
2) To compare and analyse the main issues of the selected topic and subject.
3) To develop creativities, analysing abilities, and critical thinking through the topical studies in the film and TV area.

CTV4083 HONG KONG AND TAIWANESE CINEMA

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to investigate histories, aesthetics, genres, directors and modes of production of Hong Kong and Taiwan cinema. Students need to have a basic understanding of cinema as an artistic medium as well as a cultural product subject to market economy and cultural policy of nation-states. Lectures focus on the idea of cinema as a never-ending process of struggles among filmmakers, film languages, the film industry, official cultural agendas, the audiences, and film culture. Each class meeting consists of screening, lectures, and discussion.

CTV4103 ADVANCED SCRIPTWRITING

(3 units)

Pre-requisite(s): CTV2023 SCRIPTWRITING

Course Description: This course builds upon the concepts and methods presented in CTV2023 (Scriptwriting), as students will explore the challenging process of writing an original feature length film and TV series. Advanced techniques for creating full-length drama scripts for movie and television will be introduced and practised, and they will better prepare students for future scriptwriting for the Final Year Project, TV and Film Internships, and the transition to professional work. Apart from expanding on the process of individual creative writing, we will also explore several other common professional collaborative writing scenarios, such as writing for another director, a producer, or team writing for TV.

CTV4113 STUDIES IN ASIAN CINEMA: INDIA, KOREA, JAPAN

(3 units)

Pre-requisite(s): None

Course Description: The subject matter covered in this course concerns the major film production centres of Japan, South Korea, and India. The course aims to develop insight into the concept of National Cinema, the contemporary transnational cinema, and the relationship between cinema and the cultures and societies of South and East Asia. The course will also provide students with knowledge concerning the relation between cinemas in Asia, cinemas of the West, and cinemas within the Asia region, and will consider the related industry of *Anime* in the Japanese context. Marginal cinemas such as Singapore and the Philippines; feminist, diasporic and independent filmmaking may also be included as topics. The specific objectives of the course are to engage students with this unique cluster of cinemas, particularly their respective industrial, directorial and stylistic features, and to develop critical thinking skills and attitudes relating to engagement with Asian Cinemas.

CTV4123 STUDIES IN EUROPEAN CINEMA

(3 units)

Pre-requisite(s): None

Course Description: The course centres on various European Cinemas such as France, Italy, Germany, the United Kingdom, and Russia. Concentration will focus on moments in the history of the European cinema regarded as productive cinematically and theoretically.

CTV4133 TELEVISION STUDIO PRODUCTION

(3 units)

Pre-requisite(s): None

Course Description: The course introduces basic techniques of multi-camera television studio production. The equipment, personnel, and their varying roles will be explained. Fundamental aesthetics of shot composition, continuity, shot variation, shot arrangement, lighting, sound and music recording, will all be discussed. The satisfaction and ethics of teamwork will be imparted through joint and individual production of various genres of programme in the class.

CTV4143 SPECIAL TOPICS IN FILM AND TELEVISION SUBJECTS

(3 units)

Pre-requisite(s): None

Course Description: Different subjects are designed to give students a range of current ideas and respond to new interests of the faculty. Some topics include: corporate video; non-fiction video; web-series design; etc.

CTV4153 FINAL YEAR PROJECT (CTV)

(3 units)

Pre-requisite(s): CTV4013 PRODUCTION AND MEDIA MANAGEMENT, and
CTV2063 FILM AND TELEVISION DIRECTING (for video production) or
CTV2033 COMMUNICATION RESEARCH METHODS (for dissertation) or
CTV4103 ADVANCED SCRIPT WRITING (for script writing)

Course Description: This course engages the student in supervised independent research or project work. The course aims to:

1) Develop good media projects, scripts or dissertations under the guidance of a supervisor.
2) Ensure students possess the knowledge and skills required to complete a project independently, but with guidance.
3) Provide an opportunity to students working as a team to enhance their teamwork abilities.
4) Increase creativity and/or research skills by giving students more experience in the processes of making a TV or film project, dissertation or script.

CTV4163 DIGITAL SPECIAL EFFECTS WORKSHOP

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the basic principles behind each process among the spectrum of special effects that are being practised in the film and video industry. Hands-on experience is provided in workshops in order to assist students in expanding their visual vocabularies.

CTV4173 MULTIPLE MEDIA NARRATIVE WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course will examine and compare different media narrative patterns following three interwoven thematic streams. Students will explore creative possibilities of different media, such as Music Videos, Experimental Film, Animation and Video Games; they will investigate different narrative traditions such as Myths, Poetry, Theatre and Dance, in search of semiotic patterns that transcend form; and they will practise several forms of writing that are useful in the industry, from Treatments to Grant Proposals. In the end, they will deepen their reservoir of cultural references and increase their effectiveness in developing and presenting creative concepts for a range of media formats.

CTV4183 ADVANCED DIRECTING

(3 units)

Pre-requisite(s): CTV2063 FILM AND TELEVISION DIRECTING

Course Description: This course will help advance the student's understanding and appreciation for the craft of acting as a director. First, the course will focus on examining the history and theory behind various acting methods. Then, students will focus on learning the fundamental skills and concepts related to one of those methods. They will work through a series of exercises – as actors - culminating in the performance of scenes and/or monologues. In the last part of the course, students will refine their skills in directing actors. Topics covered will include casting, script analysis, actor communication, rehearsal strategies and techniques, and working in different genres. This will culminate in the presentation of short, directed scenes.

CTV4193 ELECTRONIC MEDIA MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course explores management and business operations of television and radio stations at the local, national and global levels. Electronic Media Management provides theories and cases of how television stations operate successfully within the new information environment. Emphasis is placed on management theories, broadcast policy and regulations, organisational structure, and financial and personnel management. The course will also cover strategic management, marketing and distribution, human resource management of television and radio stations, and cable systems. It is designed to give students a basic understanding of electronic media management. The intersections of broadcasting, cable television, and the internet will be examined. The issues of across different regions, media, and industries operations will be analysed in the course.

CTV4203 MEDIA PROGRAMMING AND PLANNING

(3 units)

Pre-requisite(s): None

Course Description: This course compares media programme planning, practice, strategies, sources, and services at local, national, and international levels. Popular or successful programmes of different genres from different forms of media, including networks, TV stations and online stream media, are selected to be examples; programme audiences, schedule developments, distribution strategies, and market are analysed. The emphasis of the course is focused on the programme plan, design, creativities, and strategies. Students learn how to plan their programme proposal, including programme types, strategies, programme formats, creativities of programmes, market analyses and sponsors and advertisers. It is designed to give students an understanding of the programme developing process under the contextual factors including industrial structures, media policies and laws, and management practices of different natures of the media organisations.

CTV4213 VISUAL MEDIA STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to broaden the ability of the student to explain different aspects of visual media from a theoretical perspective. Students completing this course will acquire recent and relevant experiences of visual media, including television, streaming media, short videos, and immersive media, as well as practical skills relating to the visual media industry.

CTV4223 FILM RESEARCH METHODS

(3 units)

Pre-requisite(s): None

Course Description: Film Research Methods is a research methods module aiming to demonstrate both the fundamental principles of academic research design and the ideas and reasoning logics that underpin it as well as showcase certain philosophical, theoretical, methodological and analytical approaches that have been deployed in academic film studies. This module aims to acquaint students with a variety of academic sources, methods and methodologies currently used in film scholarship and how to talk about them in rigorous ways. It empowers students to read and understand how researchers in the discipline strategically use existing film archives and research methods to answer research questions and advance arguments, and to be able to apply these insights in their own critical enquiry (aka, the final year project).

CTV4233 ADVANCED EDITING

(3 units)

Pre-requisite(s): CTV3023 FILM AND VIDEO EDITING

Course Description: This course targets students aspiring to advance their editing skills for a deeper comprehension of, or entry into, the editing profession. Building on the foundational knowledge from CTV3023 Film and Video Editing, participants will delve into an in-depth exploration—both aesthetically and technically—of editing and assistant editing facets.

CTV4243 ADVANCED EDITING

(3 units)

Pre-requisite(s): CTV2053 VIDEO CINEMATOGRAPHY

Course Description: This advanced cinematography course serves as a progression from foundational cinematography skills acquired in the prerequisite course. Emphasis is placed on articulating diverse functions and roles within a film set, fostering effective collaboration within this structured environment. Through closely-mentored projects, students are expected to exhibit technical proficiency in a specific filmmaking discipline. The course aims to facilitate a systematic understanding of cinematography, emphasizing leadership skills. Insights into the hierarchical positioning of the camera department within a filming crew are provided, along with the requisite knowledge for collaborative endeavours. The curriculum covers topics such as set lighting, location selection, exterior shooting, camera origination, lens selection, camera movement, collaboration with other departments, set etiquette, and post-production considerations. The overarching goal is to equip students with the multifaceted skills and knowledge necessary for success in the contemporary cinematography business, emphasizing critical and creative thinking in the appreciation of cinematography's crucial role in visual media and storytelling.

DHSS2003 TRANSCULTURAL EXCHANGE IN THE HUMANITIES AND SOCIAL SCIENCES

(3 units)

Pre-requisite(s): None

Course Description: The course has been designed as an innovative and semi-autonomous learning experience inspired by

the 2030 Sustainable Development Goal of "Quality Education". Through on-line learning and a practical field experience in an identifiably different sociocultural setting, each student acquires and practices transcultural knowledge and competencies. Students identify their own perspectives and rules on transcultural exchange, and are supported to devise strategies that build capacity for lifelong transcultural exchange.

DMM2003 DIGITAL DESIGN THINKING

(3 units)

Pre-requisite(s): None

Course Description: The course helps students understand design thinking as a problem solving approach in digital media industry. This course also looks at several cases from different digital media companies that used design thinking to uncover compelling solutions. Course lectures and readings will equip them with the knowledge and tools about the implementation of design thinking in digital world. Through undertaking group projects and individual assignments, the students will learn how to think innovatively; How to apply the knowledge about design thinking to explore and shape their ideas into compelling and well-structured design proposal; How to identify, understand, and engage different audiences in their stories; How to implement their design.

DMM2013 DIGITAL MEDIA TECHNOLOGIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to extend students' visual literacy and application of creative ideas from traditional medium to digital interactive media, with the introduction of media technologies and software tools. This course will prepare students with sufficient knowledge to develop and exploit the digital media for their creative endeavours. To this end, this course will: 1) provide an intensive technical introduction to the tools and techniques of the modern editor; 2) introduce the fundamentals of film and video editing and the latest advances in electronic video post-production; and 3) develop students' editing eye through extensive lab and practical work.

DMM2023 MEDIA AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: Media and culture focus on the important relationship between mass media and the shared culture, including how cultural trends influence mass media, and how the media shapes society and culture. The content of this course aims at helping students to apply the concepts and theory to understand how media and culture are interconnected. The course assignment, lectures, discussions, readings, and the project will enable students to apply related concepts and theories to understand the function of media in shaping culture and the cultural prospect of media. The assessment methods include assignment, project, and final exam.

DMM3003 AI, DATA SCIENCE AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students with the basic concepts of statistics and data manipulation/processing. In this course, students will be exposed to fundamental concepts that enable them to generate, transform, evaluate, and analyze data from/for enterprise operation with Python.

DMM3013 DATA-DRIVEN MEDIA MANAGEMENT

(3 units)

Pre-requisite(s): GFQR1023 DATA ANALYTICS FOR BUSINESS

Course Description: Data-driven media management explores how data analytics enable the collection and organization of unprecedented amounts of data, and how to dissect that data to gain powerful managerial insights into the media industry. This course explains why it is important to leverage data when contemplating organizational choices and supplies the tools at the heart of media management. Course topics include analysing audience, content, and strategies with statistical software and statistical process.

DMM3023 DIGITAL STORYTELLING

(3 units)

Pre-requisite(s): None

Course Description: Digital storytelling is the practice of designing, sharing, and participating in a cohesive story experience across multiple traditional and digital delivery platforms - for entertainment, advertising and marketing, or social change. The course Digital Storytelling provides students with a unique, authentic, and industry relevant learning opportunity. They will have access to current theory and industry examples. This course also involves with elements or franchises of larger and more complex stories across a much more diverse range of platforms, like interactive web experiences, social media communities, mobile devices, theme parks, and even augmented and virtual reality.

DMM3033 MEDIA PSYCHOLOGY

(3 units)

Pre-requisite(s): None

Course Description: Media psychology is an important sub-discipline of psychology that focuses on describing how individuals' behaviour is influenced by media, including their feelings, thoughts, and actions in connection with the use of the media. The content of this course aims at helping students to develop an awareness of and sensitivity to media use in their daily lives by introducing media-specific psychological theories. The course assignment, lectures, discussions, readings, and project will cultivate students' ability to think critically about the effectiveness of media use and media reception. A final exam will test students' knowledge of media psychology concepts and their abilities to apply them.

DMM3043 PROJECT I: MEDIA TECHNOLOGIES

(3 units)

Pre-requisite(s): None

Course Description: Media Technologies is a project-based course focusing on the development and application of media technologies, especially in the video production industry. This course aims to introduce students with different job profiles and production processes of relevant sub-industries in the media industry, the content development of media products, and the planning, calculation, and production of media products. In this course, students will be exposed to fundamental concepts that enable students to design media projects, plan the production, and deploy the implementation.

DMM3053 PROJECT II: DIGITAL BUSINESS MODELS

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course aims to provide students with the knowledge of the fundamental and critical impacts of the Internet and how it changes traditional businesses. In addition to the increasing transmission speeds in digital data networks, the increasing possibility of automating what were previously human processes is leading to the emergence of new, digital business models. Companies first have to understand the methods and recipes for success of companies in the digital era, and then adapt and/or design their own business models to survive in competition.

DMM3063 PROJECT III: TREND AND FUTURE RESEARCH

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help students understand the methods, terms and goals of future and trend research. They will learn the sub-disciplines of sociology, cultural anthropology, research on changing values, psychology and semiotics, as well as the processes and methods of future research, which are relevant for trend research.

DMM3073 SOCIAL MEDIA MANAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course aims to introduce students with the basic concepts of social media, enterprise content management, and principles on social media. In this course, students will be exposed to fundamental concepts that enable students to formulate social media content for the company, analyze sentiments on social media, and apply methods of content management for marketing and branding purposes.

DMM4003 DIGITAL MEDIA MANAGEMENT INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with an opportunity to gain real-life working experience related to the various issues and activities associated with digital media management. Under the guidance of both faculty and workplace supervisors, students will complete a work placement of several months in a company in the digital media and communications industry or in a corresponding department in a company in another industry. Students may or may not get paid for the internship assignment.

DMM4013 DIGITAL TRANSFORMATION

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to cover analysis, methods and work techniques that enable students to advance digital change in existing companies. As entrepreneurs in companies, students learn to apply digital transformation principles; initiate, organize and evaluate new business models; recognize digitalization potential along the value chain; apply change management principles; and streamline work process.

DMM4023 LOW CODING AND DATA SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students with the basic techniques of software development and data evaluation. In this course, students will be exposed to fundamental concepts that enable students to communicate with basic terminology, work independently with business data using low coding techniques.

DMM4033 MANAGEMENT AND CONTROL

(3 units)

Pre-requisite(s): ACCT2063 FUNDAMENTAL ACCOUNTING PRINCIPLES

Course Description: This course aims to introduce students to the basic concepts and techniques in cost and performance accounting; to develop students' ability in using relevant accounting data for management policy determination, decision making, and performance evaluation based on cost types; and to enable students to determine marginal cost and breakeven points for operational planning and control.

DS1013 PYTHON PROGRAMMING FOR BEGINNERS

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with basic knowledge of computer-oriented problem modelling and solving methodologies, algorithm analysis, and structured programming by using Python. Students will learn about the basic concepts of structured programming and how to develop elegant Python programs. Specific topics will include structured programming methodology, data types, control structures, functions, and the mechanics of running, testing, and debugging. After learning this course, students will be able to solve problems, explore real-world programming development challenges, and create small yet practical python applications.

DS1023 ADVANCED MATHEMATICS FOR DATA SCIENCE

(3unit)

Pre-requisite(s): MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING or
MATH1073 CALCULUS I or
MATH1103 CALCULUS, and
MATH1003 LINEAR ALGEBRA or
MATH1053 LINEAR ALGEBRA I or
MATH1173 LINEAR ALGEBRA

Course Description: This is an advanced mathematics course for data science students. It aims to teach students advanced concepts and methods of various subjects in mathematics. It is a fundamental course to support students' further study in many subjects in data science such as advanced statistics, regression analysis, optimizations and numerical computations. This course also aims to train and improve students' mathematical thinking skills.

DS2003 FUNDAMENTALS OF DATABASE SYSTEMS

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING
or
COMP2013 OBJECT-ORIENTED PROGRAMMING or
DS1013 PYTHON PROGRAMMING FOR BEGINNERS

Course Description: This course provides data representation in a database and practices data management given a real application. Topics include: ER model, relational algebra, SQL, advance SQL, relational database design, XML database model.

DS2013 DATA PROCESSING WORKSHOP I

(1 unit)

Pre-requisite(s): None

Course Description: This workshop aims to lead students to learn independent design, research, and coding on database development. It will help students understand the concept of applying database to solve problems. By building web applications in groups, students will learn how to cooperate with team members, how to document, design, develop, and test web applications, and practice cutting edge software development technologies.

DS2033 LINUX SYSTEM MANAGEMENT AND PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with basic knowledge of Linux Operating Systems, allowing them to familiar with common shell commands, especially commands related to Linux system management techniques, such as add/remove users, install/uninstall application programs, monitor system status, kill processes, manage file systems, and more. Also, some basic C programming will be covered, such as how to use gcc/g++, and make commands to compile and run C/C++ programs, also allow them to familiar with docker tool.

DS2043 DATA PROCESSING WORKSHOP I

(3unit)

Pre-requisite(s): None

Course Description: This workshop aims to lead students to learn basic data processing pipeline using python. It will help students understand the concepts of applying data processing to solve problems. Students will learn how to deal with the whole life cycle of data processing including data acquisition, data cleaning, data storage, data analysis and data visualization. Hands on practices will be emphasized on this course.

DS2053 PROBABILITY AND MATHEMATICAL STATISTICS

(3unit)

Pre-requisite(s): MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING or MATH1073 CALCULUS I

Course Description: The course is designed to establish a foundation in probability theory and statistical inference, critical for data-driven decision-making in machine learning. It aims to bridge theoretical frameworks with computational tools, enabling students to quantify uncertainty, validate hypotheses, and derive insights from data. By the end of the course, students will be able to model uncertainty using probabilistic constructs (e.g., random variables, distributions) to describe real-world phenomena and execute statistical inference (e.g., MLE, hypothesis testing).

DS3003 DATA PROCESSING WORKSHOP II

(1 unit)

Pre-requisite(s): DS2003 FUNDAMENTALS OF DATABASE SYSTEMS

Course Description: This workshop aims to help students have some practices in working on big data processing. The course will also give a brief introduction of Hadoop platform and how to use Hadoop to do big data analytics. The students are expected to have a clear understanding of Hadoop and its application after this course.

DS3013 DATA PROCESSING WORKSHOP III

(1 unit)

Pre-requisite(s): DS2003 FUNDAMENTALS OF DATABASE SYSTEMS, and
DS3003 DATA PROCESSING WORKSHOP II

Course Description: This workshop aims at machine learning with big data. In particular, different machine learning techniques in big data scenario are investigated.

DS3023 DIGITAL LOGIC DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the basic concepts of digital systems, including analysis and design. Both combinational and sequential logic will be covered. Students will gain experience with several levels of digital systems, from simple logic circuits to programmable logic devices and hardware description language.

DS3033 TECHNICAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to equip students with some of the most demanded soft skills in current and technical business world. It aims to cultivate well-rounded students with good personal characters, effective communication skills, team work sprits and global-outlook. It aims to train the students with persuasive technical communication skills, build credibility, as well as to provide some learnable principles of interpersonal skills. It aims to train well-rounded students with entrepreneurship for the fast developing world through liberal arts education.

DS3043 DATA PROCESSING WORKSHOP II

(3 units)

Pre-requisite(s): None

Course Description: This workshop aims to help students have some practices in working on big data processing. The course will also give a brief introduction of Linux, network and internet, cloud computing, NoSQL database, Hadoop platform and how to use Hadoop and NoSQL to do big data analytics. The students are expected to have a clear understanding of Hadoop and its application after this course.

DS3053 REQUIREMENTS ENGINEERING FOR DATA SCIENCE PROJECTS

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to let students experience a complete requirements elicitation process for a Data Science (DS) project. We will learn the Volere Requirement Process, including methods to identify the correct business problem, and to derive & design innovative solutions. We will also learn how to communicate requirements properly using natural language and various modeling techniques such as Unified Modeling Language (UML) and Goal-Oriented Modeling Frameworks.

DS3063 COMPUTATIONAL STATISTICS AND PROGRAMMING

(3unit)

Pre-requisite(s): MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING or MATH1073 CALCULUS I

Course Description: The course is designed to expand students' statistical toolbox through numerical methods, with a strong emphasis on resampling techniques and simulation. Students will learn how to apply these methodologies to address analytical challenges and quantify the reliability of quantitative findings. The course emphasizes the role of computation and programming as a foundational tool of discovery in data analysis, of statistical inference, and for development of statistical theory and methods.

DS4003 OPTIMISATION METHODS

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I or MATH1003 LINEAR ALGEBRA, and MATH1073 CALCULUS I

Course Description: This course introduces fundamental theory of optimization methods and algorithms developed for solving various types of optimization problems. It will develop and promote research interest in applying the mathematical results and numerical techniques of optimization theory to real life problems.

DS4004 FINAL YEAR PROJECT I (DS)

(3 units)

Pre-requisite(s): None

Course Description: This course will enable students to demonstrate an integrated understanding of Data Science principles and techniques and gain practical experience of developing and applying enabling technologies. Students will undertake an individual project under the supervision of a faculty member and gain the practical experience of applying computer systems principles and techniques acquired from the course to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project.

DS4005 FINAL YEAR PROJECT II (DS)

(3 units)

Pre-requisite(s): DS4004 FINAL YEAR PROJECT I (DS)

Course Description: Students will undertake an individual project under the supervision of a faculty member and gain the practical experience of applying computer systems principles and techniques acquired from the course to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project. This course is the extension of the course COMP3100-Final year project I. Only those students who are competent in the FYP I will be eligible to take this course.

DS4013 DATA MINING (FOR DS STUDENTS)

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or COMP2013 OBJECT ORIENTED PROGRAMMING or STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS)

Course Description: This course introduces latest development of knowledge discovery and data mining concepts and emphasizes on data mining techniques, including data pre-processing, classification, clustering, data association and data warehouse. It can motivate students to analyse big data with modern software.

DS4023 MACHINE LEARNING

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or COMP1023 FOUNDATIONS OF C PROGRAMMING or COMP2013 OBJECT ORIENTED PROGRAMMING or COMP3153 C++ PROGRAMMING LANGUAGE or STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS)

Course Description: The course will provide an introduction to Machine Learning and its core models and algorithms. The aim of the course is to give the student the basic ideas and intuition behind modern machine learning methods as well as a bit more formal understanding of how, why, and when they work.

DS4033 TEXT MINING AND ANALYTICS

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the basic concepts, principles, and major techniques in text mining. It apprehends the value of text mining in a broad spectrum of areas, including business intelligence, information acquisition, social behaviour analysis and decision making. It will enable students to discover interesting patterns, extract useful knowledge, and support decision making, with statistical approaches applied to text data.

DS4043 INTRODUCTION TO STATISTICAL COMPUTING

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I

Course Description: The course is an introduction to statistical computing taught using R. The aim of this course is to expand students' statistical toolbox through numerical and simulation methods. Additionally, the course will teach students how to approach statistical problems from a computational perspective. Let students become proficient in everyday computational tasks with

datasets of all kinds, skilled in applications of elementary statistical methods, with an emphasis on data exploration and simple graphics.

DS4053 INTRODUCTION TO BIOINFORMATICS

(3 units)

Pre-requisite(s): None

Course Description: The course is designed to introduce the most important and basic concepts, methods, and tools used in Bioinformatics which includes an introduction to Bioinformatics, experience with select bioinformatics tools and databases currently utilized in the life sciences.

DS4063 SOCIAL COMPUTING

(3 units)

Pre-requisite(s): COMP1013 STRUCTURED PROGRAMMING or COMP1023 FOUNDATIONS OF C PROGRAMMING or COMP2013 OBJECT-ORIENTED PROGRAMMING, and STAT2003 ADVANCED STATISTICS

Course Description: The aim of this course is to introduce the latest development of social computing, emphasize social computing techniques which include crowdsoursing online, social network analysis and social platforms and motivate students to analyse data containing social interactions.

DS4073 INTRODUCTION TO DATA VISUALISATION

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to teach students how to create visualisations that effectively communicate the meaning behind data to an observer through visual perception. We will learn how a computer displays information using computer graphics, and how the human perceives that information visually. We will also study the forms of data, including quantitative and non-quantitative data, and how they are properly mapped to the elements of a visualisation to be perceived well by the observer. We will briefly overview some design elements for effective visualisation. The course will also cover with the integration of visualisation into database and data-mining systems to provide support for decision making, and the effective construction of a visualisation dashboard.

DS4083 BIG DATA ANALYTICS

(3 units)

Pre-requisite(s): COMP2003 DATA STRUCTURE AND ALGORITHMS or AI2003 DATA STRUCTURES AND ALGORITHM ANALYSIS

Course Description: 1. To introduce latest development of big data analytics and concepts of mining massive datasets; 2. To emphasize big data analytical techniques which include Finding Similar Items，Mining Data Streams，Link Analysis, Frequent Itemsets，Association rules, Clustering over Massive Datasets, Advertising on the Web，Recommender Systems, Mining Social-Network Graphs, Dimensionality Reduction; 3. To motivate students to apply big data analytics in addressing problems in real world applications.

DS4093 INTRODUCTION TO RECOMMENDER SYSTEM

(3 units)

Pre-requisite(s): DS2013 DATA PROCESSING WORKSHOP I or DS2043 DATA PROCESSING WORKSHOP I or COMP3043 SOFTWARE DEVELOPMENT WORKSHOP II or COMP2073 DATA PROGRAMMING WORKSHOP or AI1003 PYTHON PROGRAMMING, and MATH1003 LINEAR ALGEBRA, and DS4023 MACHINE LEARNING or COMP3203 INTRODUCTION TO MACHINE LEARNING or AI3013 MACHINE LEARNING

Course Description: Introduction to Recommender System provides an overview of basic methods to developing state-of-the-art recommender systems. It introduces current algorithms for generating personalized recommendations. It discusses how to measure the effectiveness of recommender systems and illustrates the methods with practical case studies. It also covers emerging topics such as deep learning. It provides basic and state-of-the art technology to build real-world recommender systems. It equips students with some necessary skills for industry or for further study.

DSS1013 BIG IDEAS IN SOCIAL SCIENCES

(3 units)

Pre-requisite(s): None

Course Description: The course aims to introduce students to key ideas, concepts, debates, and schools of thought in the social sciences, with a particular view to how they inform responses to social challenges. Covering broad topics like culture, socialisation, social interactions, social institutions, and organisations, the course gives an essential orientation to students of society, by explaining and illustrating ways in which social research addresses some of the key issues of our time.

DSS1023 INVITATION TO DIGITAL SOCIAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: The course aims to provide students with a first introduction to Digital Society, including the opportunities and challenges such a society brings. Other objectives include providing students with a toolkit for basic analysis of cases in digital society, with a first glance into the deeper workings of the digital society, and bringing them up to speed on the basic concepts and underpinnings of digital society in general.

DSS2003 EMPLOYMENT AND TAX POLICY FOR DIGITAL ECONOMY

(3 units)

Pre-requisite(s): None

Course Description: This course addresses the interdisciplinary problems and respective normative social policy solutions regarding new realities and problem constellations arising in the field of employment policy and tax policy with the coming and growing of the digital economy, while also integrating wholesome societal perspectives and wholesome perspectives within the field of social policy making.

DSS2013 SMART CITY

(3 units)

Pre-requisite(s): None

Course Description: This course will equip students with basic concepts and theories concerning smart cities, its smart solutions and possible applications that have far-reaching implications for the understanding and development of our living environment. Students will familiarize themselves with comprehensive views of the history and evolution of smart cities, the role of technology and its application/operation in smart cities (e.g. urban computing, spatial data infrastructure, artificial intelligence, internet of things), as well as government structures, public discourse and policy in the operation, management and governance of smart cities. The course emphasizes a combination of theory and practical knowledge and skills. The main purpose is to enhance students' comprehensive abilities of critical thinking, problem solving, and capacity to observe, identify, integrate, and judge broad opportunities arising from business, society, infrastructural development and urban management in this rapid digitalized world.

DSS2023 BEHAVIORAL SCIENCE AND THE DIGITAL WORLD

(3 units)

Pre-requisite(s): None

Course Description: The aims of this course are: 1. To develop basic understanding of behavioral science and their relevance to the digital society; 2. To relate the findings of behavioral science to life situations and to analyse factors affecting individual's psychological and behavioral well-being in digital society; 3. To addresses the productive and problematic use and impact of digital technologies on social life across the lifespan, exploring implications of emerging technology; 4. To provide knowledge and skills of maintaining psychological and behavioral well-being.

DSS2033 SOCIAL POLICY IN DIGITAL SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1. Introduce and explain new innovative developments of social policy and corresponding societal developments in the age of digital society; 2. Examine new strategies and methods of social policy making and delivery in the context of 21st-century societal developments; 3. Understand the needs for social policy to ready government and society for the new realities of digital societies, and correspond accordingly in a timely, effective and efficient manner, in terms of social policy making in the broadest sense.

DSS2043 MACHINE-LEARNING MATHEMATICS FOR NON-SCIENCE STUDENTS

(3 units)

Pre-requisite(s): None

Course Description: This is an introductory course in calculus, statistics, and linear algebra designed for humanities students who may not have a strong inclination or background in mathematics. The primary goal of this course is to provide the essential mathematical concepts and tools required to understand the mechanisms of AI models. Additionally, it aims to prepare students who have never had the opportunity to engage with advanced mathematics in modern contexts, enabling them to grasp the foundational principles necessary for further studies in humanities/social sciences and related fields.

DSS3003 CULTURE, DIVERSITY AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: The aims of this course are: 1. To provide an overview of culture and subcultures which allow us to consider the diversity that exist within a society; 2. To become knowledgeable of the impact of ethnicity, gender, age, and social class in a digital society; 3. To explain, then reduce ethnocentrism and stereotypical thinking; 4. To explore globalization in the process of studying diverse population.

DSS3013 EDUCATION POLICY AND DIGITAL SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course is a course in social policy, in the specific field of education policy, focusing on new challenges and problems, as well as new policy imperatives and policy solutions, regarding providing formal education in an increasingly digital society (also referred to Third Modernity in sociology). Artificial intelligence and super-digitalization are changing the world of work, and employment in general, and as a result of which the requirements for education policy, and particularly the education provided by educational institutions on the ground. This course is based on critical thinking and aims to install and develop students' critical (deep and comprehensive) thinking capacities and practice-oriented skills in education policy making.

DSS3023 NETWORK ANALYSIS FOR SOCIAL PLANNING

(3 units)

Pre-requisite(s): None

Course Description: Following the main theme of digital social science—to introduce social scientists to new tools provided by digital technologies and data sciences—this course is equipping students with the basic and fundamental understanding and tools of state-of-the-art network analysis, when applying these to a wide range of fields in public and social policy making.

DSS3033 ETHICS AND LEGAL ISSUES IN DIGITAL SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1. Offer the students a foundational knowledge of the field of professional ethics as it relates to the fields of digital society, digital competence and social policy. 2. Offer the basic legal knowledge specific to the popularization of employing digital technology in social life, with the emphasis on how to protect the rights and interests of all citizens and particularly the vulnerable groups.

DSS3043 DIGITAL EMERGENCY AND DISASTER RISK MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The aims of this course are: 1) To provide knowledge of different types of disasters ranging from personal disasters (e.g., accidents, loss of loved ones, family violence), community incidents (e.g., outbreak of infectious diseases) to large-scale natural disasters (e.g., earthquakes and tsunamis); 2) To

develop basic understanding on Emergency Management and Risk Reduction of the framework of Disaster Management Cycle from Preparedness, Response, Recovery and Mitigation for different types of major disasters including earthquakes, typhoons, river floods, forest fires and public health crisis; 3) To relate disaster management with the latest digital technology and data sciences, by introducing particularly those data bases on climate, earthquake, pandemic, transportation and human movements to predict and prepare for major natural and city critical incidents; 4) To provide knowledge and skills in effective prediction, assessment, response, recovery and risk reduction as major components of emergency management.

DSS3053 LEARNING ORGANIZATIONS

(3 units)

Pre-requisite(s): None

Course Description: The objectives of this course are: 1) to understand that forces that are shaping organizations and managers to consider the roles of learning in organisations; 2) to explore that learning occurs and analysed in different organizations and in different contexts; 3) to examine different elements, processes and skills involved in implementing a learning organisation; 4) to analyse organisational learning is interrelated with most organisational and management goals; 5) to critically examine the strategies for building learning organisations with differential theoretical perspectives and models of the process.

DSS3063 SOCIAL WELFARE INFORMATICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1) To develop basic understanding with a global perspective on comprehensive and contemporary social welfare systems that cover major issues and areas of poverty prevention, provision of social security, health and social care, employment and education, housing and protection, family and children benefits in kind and in cash, and related essential social services; 2) To relate international social welfare and major global agenda with the latest digital technology and data sciences, by introducing social welfare informatics and major digital social indicators that allow for better policy formulation; 3) To provide knowledge and skills in analyzing social change with available data derived from digital platforms effectively to enable better planning, tracking and evaluating social development.

DSS3073 CLASSICAL SOCIOLOGICAL THEORY AND THE DIGITAL WORLD

(3 units)

Pre-requisite(s): None

Course Description: This course will be about classical sociological theory. This course aims to provide students with more solid ideas about the theoretical foundation of sociology as a discipline. While the students may have come across some sociological concepts in other courses, this course deals with sociological theories in a more systematic manner. This course will acquaint students with the major intellectual concerns and perspectives of sociology. It focuses on the discussion of theories of the classical period of sociology that lays down major theoretical framework for explaining rapid social change from agricultural to industrial society, and the changing form of human behaviours and associations in modernity. It would also explore the continued relevance of classical theoretical ideas to the understanding of the emerging digital world.

DSS3083 QUANTUM SOCIAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1) Introduce the scientific realm of quantum social science, providing elementary insights on and basic theoretical understanding of quantum social science, its new theories and new methods: e.g. quantum social theory, quantum economics, quantum international relations, quantum psychology, quantum communication studies, etc. 2) Develop the basic skills needed to understand quantum social science: e.g. regarding entanglement in social sciences, quantum probabilities (e.g. with regard to quantum-like modelling) in social sciences, causal analysis of human/social/economic behavior, and the prediction of human/social/economic behavior.

DSS4023 FINAL YEAR PROJECT IN DIGITAL SOCIAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: 1. To give students opportunities to integrate academic experience and independent scholarship related to their disciplinary and inter-disciplinary expertise and professional goals. 2. To develop transferable skills by carrying out and disseminating independent research. 3. To instill in students the ethos of liberal arts and lifelong learning.

DSS4033 DIGITAL SOCIAL SCIENCE INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: Objectives of the internship are to provide an experiential learning process to apply data science and computer assisted methods to study social issues in a real world setting. It will enable students to integrate classroom learning in digital social science theories with the needs of business, government, media, health, social welfare and other policy concerns as observed and suggested by the host organizations. The internship is also intended for the students to acquire basic knowledge of their future career environment which may allow them to formulate problem statements for their final year project and goals for further studies. The experiential learning also aims to enhance students' interest in social innovations.

DSS4043 DIGITAL DISEASE AND HEALTH SERVICE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The aims of this course are: 1) To provide knowledge on basic concepts of holistic health and disease management. 2) To develop basic understanding on Digital Health and its contributions to the improvement of healthcare management and disease control. 3) To relate disease and health services management with the latest digital technology and data sciences. 4) To critically apply knowledge and skills in effective use of digital health information to promote health education and encourage healthy behaviors in the perspectives of developing Healthy Cities and building Healthy China.

DSS4053 AI-HUMAN COLLABORATION: PRINCIPLES, APPLICATIONS, AND SOCIAL IMPLICATIONS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip undergraduates with a comprehensive understanding of AI-human collaboration. It focuses on exploring how AI and humans interact across various domains, analyzing the social impacts of this collaboration, and developing students' abilities to engage critically and effectively with AI systems. By the end of this course, students will be able to: (1) Explain key concepts and principles of AI-human collaboration; (2) Analyze real-world applications of AI-human collaboration in healthcare, education, workplace, and governance; (3) Evaluate the social, ethical, and cultural implications of AI-human collaboration; (4) Develop effective strategies for communicating with and leveraging AI systems, and (5) Apply theoretical knowledge to propose solutions for social issues related to AI-human interaction.

DSS4063 HEALTHY LIVING AND HEALTHY LIFE IN THE DIGITAL AGE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to explore the principles and practices of healthy living as outlined in Chinese and Indian medicine while examining how digital technology and artificial intelligence can support and enrich these ancient health systems. Through experiential training in various health preservation methods, students will gain practical knowledge and skills to cultivate a healthy lifestyle in today's fast-evolving digital world.

DSS4073 SOCIOLOGY OF DIGITAL TRANSFORMATION

(3 units)

Pre-requisite(s): None

Course Description: Digital transformation has become a major defining force in contemporary society, reshaping how individuals, organisations, and institutions are interacting and connected. This course explores the sociological implications of digital transformation, focusing on the evolving interplay between technology and society. It will critically examine how digital technologies reshape social structures, institutions, work, identity, and everyday life. The course will discuss the historical development of digital technologies, their impact on social interaction and inequality, power dynamics, and cultural change. Using sociological theories and case studies, students will critically analyse challenges of the digital era and cautiously project the possible future of further digitalisation of the global society.

EBIS2003 INTRODUCTION TO BLOCKCHAIN

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the history and evolution of cryptocurrency, the fundamental blockchain concepts, the philosophy of decentralization behind blockchain, and the main discussions happening within the blockchain ecosystem. In addition, students will learn about potential applications of blockchain and the impact it could have on the business world. The main objective of this course is to cut through some of the confusion and help students understand what blockchain technology and cryptocurrencies are really about so that they can make informed analyses and decisions regarding its use. The course will be multi-level, multidisciplinary, and critical, with a focus towards giving students a basic understanding of how blockchains work, where they are used, their limitations, and how they affect organizations and society now and in the future.

EBIS2013 FUNDAMENTALS OF DIGITAL ECONOMY AND FINTECH

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the fundamentals of the digital economy and FinTech in three directions. First, the course educates students to understand the economic mechanisms of the digital economy and FinTech. Second, in the course, the students learn about the achievements of science and technology in the fields. Finally, the students capture the industrial developments of the digital economy and FinTech.

EBIS2023 BUSINESS ANALYTICS

(3 units)

Pre-requisite(s): Quantitative Reasoning

Course Description: Data is usually being described as new gold and oil. However, different from oil and gold, data must be processed and handled with care in order to generate values and insights for business. Nowadays, the explosion of social media and the Internet of Things has created a large volume of data which are available to businesses. In order to transform the tons of data into organizational gold, i.e., utilizing available data to drive substantial enhancement in business models, business processes, and customer values, businesses should possess business analytics capabilities. This course aims to help students develop a solid foundation for business analytics business to meet business needs. Notably, it will equip students with the knowledge of descriptive, predictive and prescriptive analytics to inform business decisions. This course emphasizes applying the acquired knowledge to the real world. Therefore, it offers students some hands-on experiences in carrying out business analytics tasks.

EBIS3003 DATABASE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students with different types of database management systems (DBMS), the principles and processes of developing database applications using structured query language (SQL) in business operations, as well as the management of database environments. The course focuses on the fundamentals of data management in organisations, and establishment of concepts and implementation methods for DBMS applications.

EBIS3013 BUSINESS SYSTEMS DESIGN AND ANALYSIS

(3 units)

Pre-requisite(s): EBIS3003 DATABASE MANAGEMENT

Course Description: This course provides students with techniques of business systems analysis and design. The course covers all the phases of the systems development life cycle: Initiation, Analysis, Design, Development, and Implementation. Emphasis is placed on concepts and techniques required in analysing information systems and their logical design, as well as the application of those concepts and techniques in various phases of the life cycle.

EBIS3023 ELECTRONIC COMMERCE

(3 units)

Pre-requisite(s): None

Course Description: This course will provide students with an understanding of the tools, skills, business concepts, strategic opportunities, and social issues that surround the emergence of electronic commerce on the Internet. Students will develop an understanding of the current practices and opportunities in e-commerce, including e-commerce models such as O2O, C2C, B2C, B2B, and appreciate the significance of e-commerce as an integral part of the more encompassing omni-channel business strategy. Students will also be able to explore many of the issues and challenges surrounding e-commerce such as cyber security, anonymity, privacy, intellectual property rights, acceptable use policies, and legal liabilities.

EBIS3033 PROGRAMMING FOR BUSINESS APPLICATIONS

(3 units)

Pre-requisite(s): None

Course Description: The course is designed to provide an introduction to programming in business environment. It assumes the students with no prior programming experience and using a simplified learn-by-example approach that stresses top-down design and modular structured programming. First part of the class will cover the basic principle of programming in general; language-independent terms, and then discusses how the programming construct in question is implemented in a specific language such as Visual Basic. The second part will emphasise on building a business application using the Rapid Application Development (RAD) tools.

EBIS3043 IT GOVERNANCE, AUDIT AND CONTROL

(3 units)

Pre-requisite(s): BUS4023/BUS4093 MANAGEMENT INFORMATION SYSTEMS

Course Description: IT Governance and policy are concerned about two things: IT's delivery of value to the business and establishing quality management of IT. In the course, students will study the role of executive management in managing and governing IT as well as issues related to controls and auditing of IT. They will learn specific objectives of IT governance; frameworks that help chart a roadmap for this function to support business values, and tool and techniques that are used in specific areas of IT governance, and policies and performance measure that need to be put in place for effective IT management and governance. This course is aligned with the COBIT control objectives, and provides a fundamental understanding of IT governance, as well as controls and auditing applications. The course will supplement the academic literature with practice oriented contents.

EBIS3063 TELECOMMUNICATIONS IN BUSINESS

(3 units)

Pre-requisite(s): BUS4023/BUS4093 MANAGEMENT INFORMATION SYSTEMS

Course Description: This course presents general principles and major developments of telecommunications and mobile networked systems in business. Emphasis is placed on applications of telecommunication technologies, devices and concepts to e-commerce and mobile commerce in secured and efficient networked business environments.

EBIS3073 DECISION SUPPORT AND BUSINESS INTELLIGENCE SYSTEMS

(3 units)

Pre-requisite(s): BUS4023/BUS4093 MANAGEMENT INFORMATION SYSTEMS

Course Description: This course aims to foster a comprehensive understanding of the basic concepts of data collection, heuristic, and analytical model of the decision support system (DSS)/business intelligence (BI) to support management decision-making in a business environment. Student will learn how to combine these elements to construct a DSS/expert system (ES) to assist managerial decision making and solve unstructured problems. It introduces new dimensions of artificial intelligence (AI) systems such as neural computing and data mining. In addition, the basic concepts of knowledge engineering and the methods of knowledge acquisition will also be studied in this course.

EBIS3083 E-CUSTOMER BEHAVIOURS AND WEB ANALYTICS

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: The purpose of this course is to study the overall customer decision-making process by analysing the customer's behaviours in an e-commerce environment. Web analytics is for understanding e-customer behaviour through analysing the spectrum of data from web sites, social media platforms, blogs, RSS feeds, and mobile devices in order to derive the most relevant insights from the available data. Major areas covered are: the customer behaviour analysis and customer data management and customer knowledge management, customer data collection methods, web data collection tools and techniques, measurement and analysis of customer data, evaluation of online marketing campaigns which enable companies to acquire, convert, and retain customers. Learning in this course will be accomplished through lectures, case studies, in-class exercises, group project and presentations, and research papers.

EBIS3093 DEVELOPING APPLICATIONS FOR MOBILE AND SOCIAL MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course provides an understanding of contemporary web and mobile applications that enhance the possibilities for social interactions, for exchange of information and content creation on mobile devices, and the use of these applications for business opportunities. It equips students with the knowledge and skills for analysis, design, implementation and operation for mobile and social media business applications. It enables students to develop mobile and social media applications for business improvement and innovations with features such as location-based services and community-based recommendation services.

EBIS3103 INTRODUCTION TO BUSINESS DATA ANALYTICS

(3 UNITS)

Pre-requisite(s): None

Course Description: This course provides students with a solid

understanding of the principles, methods, and technologies for business analytics to drive business innovations. It places special emphasis on working through applications and examples of analytics in the real world, while offering an accessible overview on some of the fundamental techniques in business analytics.

EBIS3113 BUSINESS FORECASTING AND MACHINE LEARNING

(3 UNITS)

Pre-requisite(s): EBIS2023 BUSINESS ANALYTICS or GFQR1023 DATA ANALYTICS FOR BUSINESS

Course Description: This course advances the understanding and application of data analytic processes by covering the principles and statistical learning methods commonly used in real-world business forecasting. As a branch of artificial intelligence is increasingly being adopted in business decision-making in practice, foundational machine learning concepts and techniques are further introduced to enhance managerial capabilities in understanding as well as making data-driven and highly-automated business decisions. By working on application cases using IBM SPSS, critical thinking skills, problem-solving skills, and the ability to apply different business forecasting as well as machine learning techniques to real-world business scenarios are also enhanced.

EBIS4013 SEMINAR IN E-BUSINESS MANAGEMENT AND INFORMATION SYSTEMS

(3 units)

Pre-requisite(s): BUS4023/BUS4093 MANAGEMENT INFORMATION SYSTEMS

Course Description: This seminar course emphasises the introduction and discussions of the new topics in MIS and e-business management with the assistance of faculty experts. It aims to equip students in the EBIS programme with both research literature and practical oriented themes for enhancing the abilities of conducting research, appreciating and understanding of current information systems and e-business knowledge development, and working towards individual competency and success.

EBIS4043 BIG DATA ANALYSIS AND APPLICATIONS

(3 units)

Pre-requisite(s): None

Course Description: Big data is one of the most important information technologies that transforms how business is done in today's marketplace. Local and global businesses are investing heavily in using big data analysis and related systems to drive substantial enhancement in business models, business processes, and customer values. This course provides students with a solid understanding of the principles, methods, and technologies for big data management to drive business innovations. It equips students with the tools and the practices to design a plan for big data management plan and with means to evaluate the proposed solutions to improve business processes.

EBIS4063 INFORMATION SECURITY AND PRIVACY MANAGEMENT

(3 units)

Pre-requisite(s): BUS4023/BUS4093 MANAGEMENT INFORMATION SYSTEMS

Course Description: This course will provide a comprehensive introduction and study into a broad selection of contemporary information security issues, concepts and policies, including the survey of state-of-the-art technology used to address security problems. The technical content of the course gives a broad overview of essential concepts and methods for providing and evaluating security in information process systems (operating systems and applications, networks, enterprise systems, protocols, and so on). In addition to its technical content, the course touches on the importance of management and administration, the place information security holds in overall business risks, social issues such as individual privacy, and the role of business and public policies.

EBIS4073 E-BUSINESS MANAGEMENT AND INFORMATION SYSTEMS INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students an opportunity to gain real-life working experiences in placement inside business organizations assuming responsibilities as an e-business or information technology specialist. Under the guidance of both faculty and workplace supervisors, students will work as interns and complete work assignments relating to the organization's development, management and research activities in the area of e-business and information systems. The internship assignment is expected to take 150 hours to complete plus 12 hours of lecture at the College. There may or may not be any stipend for the internship. In coordination with other members in the business organization, the internship also provides an opportunity for students to broaden their professional experiences beyond the limitations of their classroom education as well as of their own discipline. Students will be assisted by UIC, but are responsible to find a suitable professional placement. The host organization will nominate a contact person as workplace supervisor for the student through the duration of the internship.

EBIS4083 DEEP LEARNING FOR AI-DRIVEN BUSINESS APPLICATIONS

(3 UNITS)

Pre-requisite(s): EBIS3033 PROGRAMMING FOR BUSINESS APPLICATIONS or DS1013 PYTHON PROGRAMMING FOR BEGINNERS

Course Description: The emergence of AI has transformed the business world. As a specific machine learning method nested within the field of AI, deep learning mimics the learning and decision-making processes of the human brain to significantly improve the productivity of business functions through process automation, task optimization, or deriving new business insights. This course aims to not only provide students with knowledge of deep learning techniques but, more importantly, to develop students' abilities in implementing deep learning applications within business environments. Students will also acquire knowledge of a variety of deep learning applications currently being deployed across selected major business sectors, such as healthcare, finance, and e-commerce.

ECON2003 PRINCIPLES OF MACROECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students with

the main building blocks of macroeconomics, so as for students to acquire a basic understanding of how a market economy functions, to appreciate the critical macroeconomic issues facing the society, and to understand to a certain degree the going debate on these issues. This is a necessary preparation not only for many careers in private and public sectors but also for responsible citizenship in modern society.

ECON2013 PRINCIPLES OF MICROECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims first to introduce students with the basic principles and the main building blocks of microeconomics. The students should appreciate the relevance of the course materials in real life, and learn to apply them in analysing some simple economic problems commonly encountered by individuals and firms. The major topics covered are: the market forces of demand and supply, and the associated concept of elasticity; the key role of price in the resource allocation; the efficiency of, and some possible problem with, the market mechanism; the various cost measures for firms; the different forms of market competition, and the impact on social welfare; and finally, the basic role of government in the economy.

ECON2023 MATHEMATICAL ECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students (particularly undergraduate students majoring in economics) to fundamental mathematical methods which are commonly used in economics literature. The course will examine how mathematics is used to analyse economic problems, such as equilibrium models, comparative-static models, optimisation, and dynamic models. The course will provide fundamental mathematical preparation for further studies in economics.

ECON2053 ECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the principles of economics. It intends to equip learners, through various teaching and learning activities and assessment methods, with skills and knowledge to apply economic principles in contemporary economic issues. This course is also to familiarise students with the main ideas of current economists' debate and the functioning of modern macroeconomics. In order to achieve these aims we will study the behaviours of several key variables in macroeconomics: output, unemployment, inflation, consumption and investment. The main topics to cover throughout the course will include the aggregate demand-aggregate supply model, some notion of economic growth and the impact of the different policies that governments can put into motion to accommodate the economy to different shocks, and the suitability of the policies.

ECON2063 INTRODUCTION TO ECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce to non-business students the essential building blocks of economics, including the basic concepts and theories in both micro- and macro-economics, so as for students to acquire a basic understanding of how the economy functions and to appreciate the basic economic issues facing a society. This is a necessary preparation for many careers, as well as for responsible citizenship, in modern society.

ECON2083 ECONOMIC HISTORY

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS, and ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: The objective of this course is to provide students with understanding of the world economic history from the middle ages to the twentieth century. The course is designed to introduce economics graduate students to the subject matter and methodology of world economic history. The course covers three big issues: the long persistence of the Malthusian economy to around 1800, the Industrial Revolution, and the subsequent Great Divergence in world incomes per capita. Students will complete the course with a strong understanding of the historiography and a broad knowledge of how the world economy has evolved.

ECON2093 ENTREPRENEURIAL ECONOMICS

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: This course aims to introduce students about the role of entrepreneurship as an integral part of economic development and unveiling the channels through which entrepreneurs affect economic growth, inequality, and poverty. It would further offer insights into the determinants of entrepreneurial activities, and to provide students with toolbox of economics in evaluating economic incentives, business problems, industry sustainability, innovation, and economic policies in the context of entrepreneurship. It would cover both salient theoretical and problem-based approaches that have been applied in the economic understanding of entrepreneurship.

ECON2103 MICROECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce concepts & principles of microeconomics for financial mathematics students from elementary to intermediate level. The students should moreover appreciate the relevance of the course materials to real life, and learn to apply them in analysing economic problems commonly encountered by individuals and firms. The major topics covered are: the market forces of demand and supply, and the associated concept of elasticity; the key role of price in the resource allocation; the efficiency of, and some possible problems with, the market mechanism; the various cost measures for firms; the different forms of market competition, and the impact on social welfare; and finally, the basic role of government in the economy.

ECON2113 MACROECONOMICS

(3 units)

Pre-requisite(s): ECON2103 MICROECONOMICS

Course Description: This course aims to introduce the basic concepts & principles of macroeconomics for financial mathematics students, so as for students to acquire a basic understanding of how

a market economy functions, to appreciate the critical macroeconomic issues facing the society, and to understand to a certain degree the going debate on these issues. This is a necessary preparation not only for many careers in private and public sectors but also for responsible citizenship in modern society.

ECON3003 INTERMEDIATE MACROECONOMICS

(3 units)

Pre-requisite(s): ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: This course aims first to take a closer and more critical look at the main building blocks of macroeconomics which had been introduced to students in earlier courses, and secondly to equip students with some more advanced theories and techniques for them to understand and analyse major macroeconomic issues facing the society. This course will not only impart knowledge required for more specialised courses later in the Applied Economics Programme, but will also provide the theoretical and technical economic training helpful for students aspiring for positions of responsibility in business, government, or other social organisations.

ECON3013 APPLIED ECONOMETRICS

(3 units)

Pre-requisite(s): Quantitative Reasoning

Course Description: This course aims to give students a basic understanding of econometrics and regression analysis. Numerous examples will be examined in order to achieve this goal. Emphasis placed on the classical linear regression model, least squares estimation, hypothesis testing, and model building, then finally applying to practical economic problems on forecasting and analysis. In addition, this course will train students to use computer statistical software.

ECON3023 ASIA-PACIFIC ECONOMIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce to students a general survey of economic development in the Asia Pacific region. It is designed to help students to be familiarised with economic affairs and equip themselves with basic analytical tools for tackling economic issues in the region. Socio-economic factors and changes in the global environment that have given rise to the East Asian miracle and the subsequent financial crisis in 1997 will be carefully analysed. Emphasis will be placed on the understanding of economic problems in the real world. Interested students from business, social sciences and journalism should find no difficulty in understanding the reference materials.

ECON3043 MONEY AND BANKING

(3 units)

Pre-requisite(s): ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: This course is organised to help student understand both the money and financial system and its economics effects on their lives. The students will learn from this course the five core principles of money and banking, i.e. (1) Time has value; (2) Risk requires compensation; (3) Information is the basis for decisions; (4) Markets determine prices and allocate resources; and (5) Stability improves welfare. This course also aims at providing students with a general understanding of the banking industry and the importance of an efficient banking industry to the working of a market economy. It examines the structure of the banking industry, the role of the central bank, and the basic functions of commercial banks. This course also discusses the products being offered by the banks and the methods in analysing the performance of a typical commercial bank, as well the credit analysis and credit control of bank customers. Recent developments of banking regulations and capital adequacy will be discussed, particularly the Basel II and the CAMELS rating of the U.S.

ECON3053 FOUNDATIONS OF CHINESE ECONOMY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students with the basic features of the Chinese economic system and its performance since 1949, with emphasis on its post-1978 reform period. The institutional reforms in various sectors and the gradual open-up of the economy will be analysed in detail. After taking this course, the students are expected to understand why China was successful in maintaining a high economic growth in the past two decades and what challenges it will be facing in the future.

ECON3063 INTERMEDIATE MICROECONOMICS

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: This course is more advanced than an introductory course but less abstract and less technical than a graduate course. It aims at providing not only necessary tools and theories, serving as a bridge to graduate studies, but also a deeper understanding of those theories and applications for preparing students to take roles of executives in private enterprises, public organisations, economic researchers, analysts, forecasters, business journalists and teachers, who are expected to be equipped with concrete training in economics.

ECON3073 GAMES AND ECONOMIC DECISIONS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the field of game theory and strategic thinking. The course will cover topics such as Nash Equilibrium, Mixed Strategies Equilibrium, Bayesian Games, Repeated Games, and Bargaining. The course will enhance students' logical thinking skills which will be beneficial for their daily life and their future professional careers.

ECON3083 MATHEMATICAL ECONOMICS II

(3 units)

Pre-requisite(s): ECON2023 MATHEMATICAL ECONOMICS

Course Description: This course aims to introduce economics students to more advanced mathematical methods which are commonly used in economics literature. The topics covered will be linear algebra, integration, second-order differential equations, second-order difference equations, calculus of variations, control theory, discrete time optimisation, and topology. The course will provide solid mathematical foundations to students for further studies in economics.

ECON3093 INTRODUCTION TO INTERNATIONAL ECONOMICS

(3 units)

Pre-requisite(s): ECON2053 ECONOMICS

Course Description: This course aims to provide an up-to-date analytical framework for illustrating current events of international trade and finance and bringing the web excitement of international economics into the classroom. The first half of the course will be devoted to understand the classical as well as modern theories of international trade, trade policy and international economic integration. The second half will focus on international finance and macroeconomics of open economy, understanding the difference between fixed and flexible exchange rate systems, balance of payments and international monetary problems.

ECON3113 LINEAR ALGEBRA FOR ECONOMICS AND FINANCE

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the theory and technics of matrices, vector space, and liner programming, as well as their applications in economic models. After studying this course, students will have a better mastery of knowledge in linear algebra. With extensive examples and application in economic and financial areas, it will help them in studying economical and finance courses currently and in the future.

ECON3123 CALCULUS FOR ECONOMICS AND FINANCE

(3 units)

Pre-requisite(s): None

Course Description: This course introduces necessary mathematical ideas and techniques in single variable calculus and their basic applications in economics and finance, so that students can study economics and finance courses smoothly. With extensive examples of application in economic and financial areas, it also provides the foundation for more advanced economics and finance studies.

ECON3133 INTRODUCTORY ECONOMETRICS

(3 units)

Pre-requisite(s): MATH2033 MATHEMATICAL STATISTICS

Course Description: This course aims to give students a basic understanding of econometrics and regression analysis. Numerous examples will be examined in order to achieve this goal. Emphasis will be placed on the classical linear regression model, least squares estimation, hypothesis testing, and model building, and application to practical economic problems on forecasting and analysis. In addition, this course will train students to use computer statistical software.

ECON3143 POLITICAL ECONOMY

(4 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with understanding of the principles of Marxist Political Economy and to cultivate students' ability to comprehend the way economic systems work. The course emphasizes on introducing to students the essential economic ideas and their power to explain, predict, and improve what happens in the world. The teaching contents will start with defining the scope of political economy as a subject, followed by discussions of the nature and the research methods in this disciplinary area. Illustrations of using the ideas and tools of political economy in analysing the contemporary socio-economic issues in China and around the world will also be included.

ECON3153 PROGRAMMING FOR ECONOMIC AND BUSINESS ANALYSIS

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS, and ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: Economic and business models and analytics need to be implemented with tools and technologies. This course aims to provide students with modelling skills to formulate, analyse and solve economic and business problems by way of applying basic programming knowledge. Instead of training an expert in programming knowledge, the course focuses on introducing the essential techniques for students to become effective economic and business modellers. Student will learn about computational thinking, experimental methodology and empirical methods for economic and business modelling and analysis. Wide range of economic problems and business applications will be discussed and analysed in the course.

ECON3163 SELECTED READING FROM DAS KAPITAL

(3 units)

Pre-requisite(s): None

Course Description: This course serves as an opportunity to study Marxist political economy at the intermediate level. By reading selected topics from the Marx's original work, the students would be guided to critically study and discuss some of the most important theories from Das Kapital. The focus will be on equipping students with an in-depth understanding of the methods and principles of Marxist economics, and of the critique of the capitalist mode of production by Marx.

ECON3173 CROSS SECTION AND PANEL DATA ANALYSIS

(3 units)

Pre-requisite(s): ECON3013 APPLIED ECONOMETRIC

Course Description: This course builds on ECON3013 Applied Econometrics to further discuss advanced topics in cross-sectional and panel data modeling. The focus is on understanding the theoretical aspects that are critical in applied work and the ability to interpret empirical results correctly. The topics covered will reflect the development of contemporary applied micro-econometrics. These topics include discrete choice model, panel data modeling and regression, instrumental variables regression, and program evaluation methods (e.g., regression adjustment, propensity score matching, and difference-in-differences methods). This course adopts a learning-by-doing approach to teaching econometrics, which emphasizes the application of econometrics to real-world problems. The students will also learn how to effectively use Stata do-file programming techniques, including local and global macros, r-returns and e-returns, implicit and explicit loops, and debugging techniques. After attending the course, the students will be able to set up and manage an appropriate causal inference design under observable and unobservable selections.

ECON3183 TIME SERIES DATA ANALYSIS

(3 units)

Pre-requisite(s): ECON3013 APPLIED ECONOMETRIC

Course Description: This course builds on ECON3013 to discuss further topics in time series data modeling. It aims to motivate time series econometric modeling by using real-world empirical applications in the fields related to economics and finance. The topics covered reflect the developments of contemporary applied time series econometrics, which include AR, MA, ADL, Nonstationarity, Unit Root Test, Cointegration, Granger Causality Test, ARIMA, GARCH, VAR, ECM, etc. The focus will be on understanding the theoretical aspects of applied work and the ability to interpret empirical results correctly. In addition, this course adopts a learning-by-doing approach to teaching econometrics. Weekly computer labs will be provided to coach students using Stata do-file programming techniques for their empirical studies. By combining the econometric theory acquired in lectures with software skills introduced in seminars, students can become sophisticated consumers of econometric models and econometric software packages and do so mathematically appropriate at the advanced level and in research style.

ECON3193 BEHAVIOURAL ECONOMICS

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: This course builds on ECON2013 to introduce students to the field of behavioral economics—the subfield of economics that uses economic tools coupled with insights from psychology to better understand human behavior. Economic research in recent decades has discovered empirical deviations from the model of homo economics, the rational, egoistic decision maker assumed in “standard” economic theory. This course will explore critically the challenges these behavioural irregularities pose for economic theory, including topics such as Expected Utility, and Prospect Theory. The course will also discuss what might be driving a particular behaviour or economic outcome, and how to carefully test our hypotheses using experiments on a wide range of behaviours, including risky behavior, time preferences, and wellbeing.

ECON3203 INTERNATIONAL FINANCE

(3 units)

Pre-requisite(s): ECON2003 PRINCIPLES OF MACROECONOMICS, and ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: This course helps students to assimilate the theories and applications of international finance and equip them with modelling techniques for international macroeconomic policies. It covers three main areas: (1) The foreign exchange market, theoretical and empirical analyses of exchange rate determinations; (2) macroeconomic policy and policy coordination in the world economy under different exchange rate systems; and (3) international monetary system and international financial environment.

ECON4003 ECONOMIC AND BUSINESS FORECASTING

(3 units)

Pre-requisite(s): ECON3013 APPLIED ECONOMETRICS

Course Description: This course aims to introduce quantitative methods and techniques for time series modelling, analysis, and forecasting of economic and business data. Topics include time series properties of fluctuation, cycle, seasonality, trend, unit roots tests for stationary. Models such as autoregressive and distribution lags, moving average and exponential smoothing, ARIMA, ARCH and GRACH, Transfer Function and Intervention models will be discussed with both statistical theory and practical methods of model building and analysis. Emphasis will also be put on the applications in economic and business related areas.

ECON4013 INDUSTRIAL ORGANISATION

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: The objective of this course is to equip students with the analytical skills of helping a firm to make an optimising strategy. Through studying various market structures and environments, students will learn the firms' optimal decisions, such as pricing decisions, production decisions, location decisions, merging decisions, and outsourcing decisions, etc. Other than studying from the perspectives of firms, students will also learn what policies and regulations a government should introduce in order to promote competition and increase welfare of the whole economy.

ECON4023 LABOUR ECONOMICS

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: This course aims to provide an understanding of the labour market in an economy. It seeks to describe, theorise, and analyse the behaviour of the labour market. Issues of investment in human capital (education and on-the-job training), wage differentials and discrimination are discussed. Applications of concepts and theories in the area of human resources and personnel economics (labour turnover, labour mobility and incentive pay schemes) are also presented. To enhance the understanding and the application of labour economics theories, training on data analysis and knowledge of analytical tools are provided. This course will provide the theoretical and technical training in economics helpful for students aspiring for positions in business, government, or other social organisations.

ECON4033 MONEY AND FINANCE IN CHINA

(3 units)

Pre-requisite(s): ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: This course aims at fostering an understanding of the functions and the administration of money and finance in Mainland China, and their impact on the economy at both the micro and the macro levels. Fiscal, monetary and exchange rate systems will be analysed from optimality as well as policy viewpoints. The developments of the post-1979 and post-1994 financial reforms and their policy implications will be emphasised. Financial relations between the Mainland and Hong Kong will also be investigated.

ECON4043 PUBLIC FINANCE

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS, and ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: This course discusses the role of government and the economics of public sector. The course will provide an understanding of reasons for government intervention in the economy, analyzing the benefits of possible government policies, and evaluating the responses of economic agents to government actions. The course will cover externalities, public goods, education, income redistribution, social insurance programs, tax policies, and fiscal federalism. The analytical tools, models and applications to the real world economic problems are emphasized.

ECON4053 DEVELOPMENT ECONOMICS

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS, and ECON2003 PRINCIPLES OF MACROECONOMICS

Course Description: This course aims to introduce students (particularly undergraduate students majoring in economics) to the field of development economics. The course will explore key issues in development economics, such as growth theories, roles of technology, urbanisation, human capital, health, roles of government, poverty, income inequality, sustainable development, and financing for development. The course will put special emphasis on the related issues of developing economies and of under-developed economies. The course will enable students' to understand the issues of development economics in a comprehensive manner, and will enable students to actively participate in the public discussions. To see how the theories are employed in real life scenarios, case studies will be employed.

ECON4083 INTERNATIONAL TRADE

(3 units)

Pre-requisite(s): ECON2013 PRINCIPLES OF MICROECONOMICS

Course Description: The objective of this course is to train students to use economical analytical frameworks to understand international trade: what determines its volume and its pattern. Then, through these analyses, students can understand the implications of international trade to an economy: why trade benefits all participating economies. Lastly, students can understand the impacts of different protectionist policies that hinder international trade.

ECON4093 URBAN ECONOMICS

(3 units)

Pre-requisite(s): ECON3013 APPLIED ECONOMETRICS, and ECON3063 INTERMEDIATE MICROECONOMICS

Course Description: The objective of this course is to introduce students to the study of fundamental economic decisions regarding location and land use. It also aims to develop sound knowledge in the organisation and development of urban and regional economics. In addition, this course will provide students analytical tools for evaluating economic impacts of urban policies and prepare students for a successful career in fields such as business location, business strategy, urban and transport planning, housing and community development, and real estate marketing and investment.

ECON4103 APPLIED ECONOMICS INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide an opportunity for students to gain real-life working experience in organizational departments related to economics, finance, operations, and data analysis. The primary intention of this course is to provide the opportunity for students to work in various departments related to their discipline including investment analysis, financial risk analysis, and stockbroking functions. A secondary intention is for students to use the internship placement to broaden their own experience beyond the limitations of their chosen discipline. Under the guidance of both faculty and workplace supervisors, students will work in an organization as interns and complete work assignments that are primarily related to the students' discipline. The internship assignment is expected to take up no less than 150 hours to complete plus 12 hours of lecture at the College, and it may or may not be paid for. Students will be assisted by UIC, but they are responsible for finding professional placements. The host organization will nominate a contact person for the student for the duration of the internship.

ECON4113 ENVIRONMENTAL ECONOMICS

(3 units)

Pre-requisite(s): ECON3063 INTERMEDIATE MICROECONOMICS

Course Description: The objective of this course is to introduce students to the study of broad-based treatment of the theory and application of environmental economics. It also aims to develop sound knowledge in the organisation and development of environmental economics. In addition, this course will provide students analytical tools for evaluating economic impacts of environmental programs and policies. The course will cover market failure, cost-benefit analysis, cities and environmental sustainability, air pollution, environmental regulation, global warming, and the relationship between environmental quality and economic development.

ECON4123 REAL ESTATE ECONOMICS AND FINANCE

(3 units)

Pre-requisite(s): ECON3063 INTERMEDIATE MICROECONOMICS

Course Description: This course aims to introduce students to the most fundamental concepts, principles, analytical methods and tools useful for making investment and finance decisions regarding real estate assets. It also aims to develop sound knowledge in the organization and development of Real Estate market. Students will learn skills to evaluate property value by using approaches from both urban economics and financial economics.

ECON4133 MICROECONOMIC THEORY

(3 units)

Pre-requisite(s): ECON3063 INTERMEDIATE MICROECONOMICS

Course Description: The objective of this course is to present a treatment of the analytic tools of microeconomics that would allow

students to apply these tools on their own. The course begins with the neoclassical model of consumer and firm optimization, including decisions involving time and risk, and moves on to the market coordination of these individual decisions, including discussion of whether market outcomes are desirable. All theories will be derived by calculus, which offers deeper ways to examine the same issues that one can also explore verbally and graphically. The calculus treatment will be helpful to students who have appropriate backgrounds.

ENG1003 INTRODUCTION TO THE STUDY OF LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: The primary aim of this course is provide students with critical skills for reading and interpreting literature in English. While providing basic knowledge of literary texts, authors, and traditions, the course also trains students to be better readers and more competent writers. Finally, by gaining perspectives on various literary traditions, students will develop global perspectives on English speaking cultures.

ENG1013 FOUNDATIONS OF LANGUAGE STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: (1) Raise students' awareness of language via the study of various aspects of human language, and develop students' sensitivity to the formal and aesthetic qualities of language. (2) Enable the student to understand the nature of language and how language is used as a vehicle for thought, creativity, reflection, learning, self-expression, analysis and social interaction, which comprises the integration of linguistic, cultural and social components. (3) Introduce students to the concept of language structure, and the social and cultural functions of language. (4) Prepare students for further research and study (and presentation) in language or linguistics.

ENG1013 INTRODUCTION TO THE STUDY OF LANGUAGE

(3 units)

Pre-requisite(s): None

Course Description: This is a general introductory course to raise students' awareness of language via the study of various aspects of human language, including: sound patterns, word structure, sentence patterns, historical changes of language, dialects, language families, society and language, language acquisition, writing systems; introduce students to the concept of language structure, and the social and cultural functions of language; prepare students for further, detailed research and study (and presentation) in language or linguistics.

ENG2043 SPEECH AND ORAL COMMUNICATIONS

(3 units)

Pre-requisite(s): None

Course Description: The course focuses on basic oral communication theory, problems of listening, interviewing, speech evaluation, and developing poise and confidence. Students will learn effective oral communication skills in a variety of speaking situations such as in small groups and in front of public and professional audiences. At the same time they will develop argumentative skills by forming and evaluating persuasive speeches. The course also focuses on the principles of effective listening skills in a variety of speaking situations in and out of the classroom. Special emphasis will be placed on communication in a global context.

ENG2053 PROFESSIONAL AND TECHNICAL WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on how to write persuasively and skilfully, and at the same time how to evaluate and productively revise and edit written work. This course is an intensive, practical examination of ways to write powerful, audience-driven documents in a variety of business, professional, and technical contexts. Students will also learn how to make effective presentations supported with appropriate documentary and visual aids.

ENG2063 CHILDREN'S LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: This course seeks to examine a wide variety of literature for and about children. It hopes to encourage students to identify and articulate currents of thought in the texts they encounter, to explore the manner of the expression, and to make comparisons where appropriate. Finally, and to a limited degree, the course also endeavours to locate its study within an educational context, regarding literature not only as literature but as a medium of instruction as well.

ENG2083 DISCOURSE AND GRAMMAR

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop: an insight into how grammar of English works and how meaning can be shaped by context; an awareness of the grammatical and discoursal features of various types of discourse; the skills in analysing texts at the sentence and discourse level; and the skills in applying grammatical understanding to assess the quality of spoken and written texts.

ENG2093 THE SHORT STORY

(3 units)

Pre-requisite(s): None

Course Description: The short story offers a basic introduction to this important genre of literature. Students focus on the critical evaluation of representative short stories by diverse authors from around the world. In doing so, students will be encouraged to identify and articulate currents of thought in the texts they encounter, to explore the manner of the expression, and to make comparisons where appropriate. The course will proceed chronologically and examine precursors of short fiction and then the development of modern and postmodern writing.

ENG2113 PRAGMATICS AND DISCOURSE ANALYSIS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop an awareness of how meaning is related to linguistic form and how it is conveyed in context, and to equip students with the discourse-analytic tools and

skills for studying how language, both spoken and written, enacts social and cultural perspectives and identities.

ENG2123 INTRODUCTION TO CORPUS LINGUISTICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims: (1) for students to become familiar with and be able to use the different kinds of corpora currently available; (2) for students to create their own corpora using available software; (3) for students to analyse data using corpus and come up with their own hypotheses from their analysis; and (4) for students to apply the use of corpus in their professional contexts.

ENG2143 NEW MEDIA LITERACIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop: an interdisciplinary perspective on how various new media, such as the internet, multimedia and text messaging, shape our communication practices and possibilities; the critical skills requisite to analyse and reflect on the literacy practices in various types of new media discourse, and the creative skills requisite to design multimodal forms of new media discourse for effective communication.

ENG2153 CREATIVE WRITING FOR PUBLICATION

(3 units)

Pre-requisite(s): None

Course Description: This course will deepen creative writing skills and creative aptitude through the exploration by students of different genres of fiction and non-fiction writing. Apart from gaining experience and confidence in writing, students will develop an appreciation for the ways in which language, identity, and personal growth are inter-connected. Above all, students will come to understand that writing is a process which comprises revision and careful editing. By presenting their work to the class on a regular basis, speech and presentations skills will be improved. Further, students will learn how to format their work for submission to an agent, editor and/ or publisher.

ENG2163 BRITISH LITERATURE: EMPIRE AND IDENTITIES

(3 units)

Pre-requisite(s): None

Course Description: 1) To enhance overall English proficiency through reading, writing, classroom presentations, and activities. 2) To develop a knowledge of texts and genres within the tradition of British literature. 3) To acquire critical vocabulary for interpreting literature. 4) To understand the cultural and historical contexts of literary texts.

ENG2163 BRITISH LITERATURE: THE EMPIRE AND THE CRISIS OF IDENTITY

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of British literature, touching on major themes, texts, and contexts. Students will read widely and gain perspectives on the cultural history of Britain. Through writing tasks, students will also be asked to reflect on the literature they have read as well as explore various ways of interpreting literary texts. Instructors must cover areas from the recommended readings below.

ENG2173 AMERICAN LITERATURE: TRADITIONS OF DEMOCRACY AND DISSENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of American literature, touching on major themes, texts, and contexts. Students will read widely and gain perspectives on the cultural history of America. Through writing tasks, students will also be asked to reflect on the literature they have read as well as explore the various ways of interpreting literary texts. Instructors should cover areas from the recommended readings below.

ENG2183 ENGLISH PHONETICS AND PHONOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to basic concepts in phonetics and phonology, and the sounds and sound system of English; develop students' recognition and production of the sounds of various English dialects; and develop their ability to analyse phonological phenomena and phonological structure.

ENG2193 LEXIS AND MORPHOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course will allow students to develop awareness of how words are formed, how they cross word class boundaries, how words combine together, how languages lose and gain words, and how idioms and metaphor are key elements in the creative and effective production and comprehension of language.

ENG2203 INTRODUCTION TO WESTERN DRAMA

(3 units)

Pre-requisite(s): None

Course Description: This course will require students to read, analyse, and perform dramatic works in English. The course will provide an overview of the history of Western drama by examining significant works from the Ancient Greeks via the Renaissance and Victorian eras, up to the contemporary period. It will explore theories and styles of drama and place the specific readings in their social, political, and theoretical contexts. At the same time, it will introduce basic creative processes associated with the production and performance of plays.

ENG2213 INTRODUCTION TO FILM AND LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce the study of literature and film in tandem, offering students the opportunity to perform close readings of literary texts and their film adaptations, in order to explore the similarities and differences between both the texts themselves and their corresponding modes of analysis. Textual analysis techniques will be enriched by introducing students to several exciting critical approaches, and the novels and films will not only be placed within contemporary theoretical frameworks, but

also cultural contexts dependent on genre and theme.

ENG2223 ENGLISH THROUGH MEDIA

(3 units)

Pre-requisite(s): None

Course Description: 1. To help students improve their English proficiency through media; 2. To expose students to different methods of language learning using different types of media; 3. To teach students to think critically about various forms of media in English; and 4. To teach students to think critically about how media represents language and culture.

ENG3003 DECOLONISING ENGLISH LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: The aims and objectives of this course are: 1) To enhance overall English proficiency through reading, writing, classroom presentations, and activities. 2) To develop a knowledge of texts and genres within various traditions of the broader English-speaking world. 3) To acquire critical vocabulary for interpreting literature. 4) To understand the cultural and historical contexts of literary texts from the perspective of marginalised voices.

ENG3003 WORLD LITERATURE IN ENGLISH

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of world literature in English, touching on major themes, texts, and contexts. Students will read widely and gain perspectives on the diverse field of world literature in English. Through writing tasks, students will also be asked to reflect on the literature they have read as well as explore various ways of interpreting literary texts. This course will place particular emphasis on the relationship between literature, the colonial past, and the postcolonial present.

ENG3023 INTRODUCTION TO PSYCHOLINGUISTICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: (1) introduce the major concepts and theories in the area of Psycholinguistics; (2) demonstrate the importance of these concepts and theories in developing an understanding of language comprehension, language production, and language acquisition; (3) help students develop an understanding of the relationship between language and the processes of the brain and mind.

ENG3033 ADVANCED ENGLISH COMPOSITION

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on developing academic and professional writing skills through intensive reading, discussion, and writing tasks. Students will write in various modes, developing an awareness of style, diction, and voice in their writing. They will learn how to write persuasively and skilfully, and at the same time how to evaluate and productively revise and edit written work.

ENG3043 RHETORIC, ARGUMENTATION, AND DEBATE

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on developing academic and professional writing skills through intensive reading, discussion, and writing tasks. Students will write in various modes, developing an awareness of style, diction, and voice in their writing. They will learn how to write persuasively and skilfully, and at the same time how to evaluate and productively revise and edit written work.

ENG3053 ENGLISH AS A WORLD LANGUAGE

(3 units)

Pre-requisite(s): None

Course Description: The course aims to (1) help students acquire a new perspective on English in its totality, not as the language of a few traditional English-speaking countries but as a de facto ‘world language', with many ‘old' and ‘new' varieties which exhibit their own linguistic features and functions; (2) enable students to analyse the linguistic as well as social, political, cultural issues arising from the emergence of English as a world language; and (3) enhance global communicative skills and be able to recognise and distinguish common dialects, accents, and other linguistic variations of English.

ENG3063 TRAVEL WRITING AND THE LANGUAGE OF TOURISM

(3 units)

Pre-requisite(s): None

Course Description: This course will examine the profound relationship between language and the experiences of travel: how travel narratives create, reinforce and challenge the “truths” about places, peoples and cultures. Besides being introduced to different types of travel writing and the scope of politics in representation, students will examine the language used within tourism industries. They will discover the different ways of and reasons for writing about a journey. Students will also take a few short trips to the Zhuhai and Guangdong area in order to experience an ethnic neighbourhood or a cultural milieu that is not familiar to them. Through short travel narratives, students will also practise the skills in story-telling and narration that are necessary to convey adventure and sensory impressions while expressing a well-informed respect for the subject of their stories.

ENG3073 LANGUAGE AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course explores the interactive relationship between language and society. It aims to make the students aware that a second language cannot be learned effectively if the learning is separated from the social background of the target language. Though learning about the vocabulary and grammar of a language without learning anything at all about its society is in principle possible, social questions are harder to ignore as soon as one starts to consider the language as an object of research. The course focuses on the societal influence on language use and the changes in language structure, with a focus on the English language.

ENG3083 LANGUAGE AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: The course aims to (1) demonstrate connections among language and culture, social life, political relations, and personal experience; (2) develop an understanding of different approaches in the fields of sociolinguistics and linguistic anthropology; and (3) foster critical perspectives on the status of English and other languages in China today.

ENG3083 LANGUAGE AND ETHNOGRAPHY

(3 units)

Pre-requisite(s): None

Course Description: 1. Demonstrate connections between language and culture, social life, political relations, and personal experience. 2. Develop an understanding of different approaches in the fields of sociolinguistics and linguistic anthropology. 3. Foster critical perspectives on the status of English and other languages in China today. 4. Engage in ethnography and linguistic analysis. 5. Carry out small-scale research, focusing on language variation in contextualized settings.

ENG3093 READING POETRY

(3 units)

Pre-requisite(s): ENG1003 INTRODUCTION TO THE STUDY OF LITERATURE

Course Description: 1) To develop cultural literacy by exploring the diverse and multifaceted field of poetry, with an emphasis on contemporary poetry. 2) To enhance critical reasoning and interpretive skills by reading poetry in terms of how it promotes, rejects, and reflects social expectations and values (identity, class, gender roles, colonialist attitudes, etc.). 3) To enhance creative aptitude and foster an appreciation for poetic expression.

ENG3123 POSTHUMAN FUTURES: SCIENCE FICTION SINCE 1960

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce the genre of science fiction by providing an overview of its early roots in popular culture (including its influence on film and comics), before turning focus to the post-New Wave era of sci-fi, and its impact upon the Western academy. From canonic works of the 1960s by Philip K. Dick and Ursula K. Le Guin, to lesser-known examples from as recently as the last decade, this module seeks to showcase the cutting edge of the genre, exploring various subgenres such as cyberpunk, splatterpunk and slipstream, in order to challenge preconceived notions of what constitutes modern science fiction. In addition, the course will explore the recent schools of critical thought underpinning science fiction studies, such as posthumanism and transhumanism, in order to build upon existing critical knowledge and further understanding of and engagement with contemporary critical discourse.

ENG3143 ANALYSING MULTIMODAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: develop an awareness of the complexities of contemporary communication, which is achieved not only through language but through a variety of modes, such as image, sound, posture, gaze, gesture, movement, etc.; and equip students with the analytical tools and skills to study how meanings are constructed through multiple modes.

ENG3153 ENGLISH THROUGH MEDIA

(3 units)

Pre-requisite(s): None

Course Description: The course aims to : (1) help students improve their English proficiency through media; (2) expose students to different methods of language learning using different types of media; (3) teach students to think critically about various forms of media in English; and (4) teach students to think critically about how media represents language and culture.

ENG3163 DRAMATIC WORDS: THEATRE AND PERFORMANCE

(3 units)

Pre-requisite(s): None

Course Description: This course will require students to read, analyse, and perform dramatic works in English. The course will build on students' previous knowledge of dramatic form and performance techniques, to advance knowledge by analysing major genres and generic conventions within the discipline, such as comedy, tragedy, realism, theatre of the absurd, etc., in order to further enhance and strengthen students' drama education and understanding. The course will examine significant classical and contemporary works from key Western dramatists, comparatively read via a particular generic frame. It will explore theories and styles of drama and place the specific readings in their social, political, and theoretical contexts. At the same time, it will develop understanding of creative processes and performance techniques associated with the production of plays.

ENG3173 CONTEMPORARY LITERARY THEORY AND CRITICISM

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to some of the principal approaches to literary interpretation and critical theory. Students will be expected to read short selections of theoretical texts, and to investigate the application of critical approaches to literature. One aim of the course will be to provoke students to engage with diverse schools of critical theory from the biographical, comparative, and psychoanalytic to Marxist, gender critical, and postcolonial theories. Students will respond to weekly writing prompts on the critical theories and/ or literatures with the objective of producing reflective, interpretative, creative, and argumentative pieces.

ENG3183 CREATIVE WRITING FOR PERFORMANCE

(3 units)

Pre-requisite(s): None

Course Description: This course will develop creative writing skills and creative aptitude by allowing students to explore and experiment with different genres of writing, within the larger context of performance. The course will cover several types of performance-oriented writing, such as spoken-word and slam poetry, script-writing for stage and radio, and screenwriting. These various modes will offer students the chance to practice composition styles both individually and collaboratively, as well as develop genre-specific knowledges regarding their technical features and

conventions. In addition to in-class critiques and peer-review, students will be given the chance to practice and perform for an audience on a regular basis, from which their speech and presentation skills will also be improved.

ENG3203 INTERCULTURAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1. develop an understanding of communication practices between people of different cultural identities and in culturally complex professional contexts; 2. explore the representations of different groups in the media and in professional discourse; and 3. equip students with the strategies for how they may approach intercultural communication in an effective way.

ENG3203 LANGUAGE AND INTERCULTURAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop an understanding of communication practices between people of different cultural identities and in culturally complex professional contexts; explore the representations of different groups in the media and in professional discourse; and equip students with the strategies for how they may approach intercultural communication in an effective way.

ENG3213 LANGUAGE IN BUSINESS AND LEGAL COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce a genre-based approach to analyse and evaluate the language use in professional genres from various business and legal settings, and foster students' writing and speaking skills for communicating with specific purposes in business and legal settings.

ENG3223 COMPARATIVE LITERATURE: READING ACROSS CULTURES

(3 units)

Pre-requisite(s): None

Course Description: Upon completion of the course, students will be able to: 1. Enhance their understanding of the selected texts from both the Chinese and Western literary traditions; 2. Identify and critically analyze similarities as well as differences between Chinese and Western literary traditions; 3. Make meaningful and reflective comparisons in cross-cultural communications; 4. Sharpen cultural sensitivity in international communications.

ENG3223 CROSS-CULTURAL STUDIES OF LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: This course is intended to guide students to read and interpret literature from a cross-cultural perspective. Students will be expected to read works from both Chinese and Western literary traditions. Readings will be organized around either thematic topics such as literary journeys, death, and romantic love or literary genres such as lyric poetry, Bildungsroman, and ghost stories. Chinese texts will be read in English translations and problems of translation will be addressed when necessary. Students' performance will be measured through class discussions, group presentations, writing assignments, and a final exam.

ENG3233 NONFICTION NARRATIVE WRITING AND EDITING

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on nonfiction narrative writing, including literary journalism, travel writing, personal essays, and other fact-based storytelling. This course is for students who are interested in publishing as well as in careers in travel-writing, report writing, and proposal writing.

ENG3243 RESEARCH WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course will offer students the opportunity to learn and apply research skills to a real-world problem or challenge culminating in the production of a piece of research conforming to rigorous academic and professional standards. The focus of this course is on developing writing and research skills simultaneously, allowing students to expand critical thinking while engaging in writing tasks.

ENG3253 ADVANCED READING AND WRITING

(3 units)

Pre-requisite(s): UCLC1013 ENGLISH FOR ACADEMIC PURPOSES I, and UCLC1023 ENGLISH FOR ACADEMIC PURPOSES II, and UCLC1033 ENGLISH FOR ACADEMIC PURPOSES III

Course Description: This course focuses on developing academic and professional reading and writing skills at an advanced level through intensive reading, discussion, and writing tasks. Students will read from texts across disciplines and write in various modes, developing an awareness of style, diction, and voice in their writing.

ENG3303 CONTEMPORARY LITERARY THEORY

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to some of the principal approaches to literary interpretation using current critical theory. Students will be expected to read short selections of theoretical texts, and to investigate the application of the theory in their reading of literature.

ENG3313 FOUNDATIONS OF LITERARY CRITICISM

(3 units)

Pre-requisite(s): None

Course Description: This course explores the major critical approaches to reading and interpreting literature that developed throughout the twentieth century. Literary criticism attempts to answer a range of questions central to the nature of literary experience. It examines the production of value and meaning in works of art, grapples with the mediating power of history and genre in framing how we understand those works, and highlights the role of tropes and formal ele-ments such as imagery, allusion,

metaphor, symbol, sound, theme, and narrative in shaping how we experience texts aesthetically. Literary criticism also explores questions of author-ship, intentionality, and intertextuality. In reflecting on these questions, students will engage critically with some of the most influential critics, schools of thought, and conceptual prob-lems that have come to define literary studies in the past century, ranging from practical criticism to reader response, and from semiotics to deconstruction. The course will focus primarily on the tradition of close reading that developed from Arnold to Derrida, and con-clude with a brief foray into contemporary developments in criticism. As a final project, stu-dents will undertake a theoretically informed reading of a text of their choice.

ENG3313 LITERARY CRITICISM IN THE TWENTIETH CENTURY: PRACTICAL CRITICISM TO DECONSTRUCTION

(3 units)

Pre-requisite(s): None

Course Description: This course explores the major critical approaches to reading and interpreting literature that developed throughout the twentieth century. Literary criticism attempts to answer a range of questions central to the nature of literary experience. It examines the production of value and meaning in works of art, grapples with the mediating power of history and genre in framing how we understand those works, and highlights the role of tropes and formal elements such as imagery, allusion, metaphor, symbol, sound, theme, and narrative in shaping how we experience texts aesthetically. Literary criticism also explores questions of authorship, intentionality, and intertextuality. In reflecting on these questions, students will engage critically with some of the most influential critics, schools of thought, and conceptual problems that have come to define literary studies in the past century, ranging from practical criticism to reader response, and from semiotics to deconstruction. The course will focus primarily on the tradition of close reading that developed from Arnold to Derrida, and conclude with a brief foray into contemporary developments in criticism.

ENG3353 SHAKESPEARE: LITERATURE, PERFORMANCE AND ADAPTATION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the Shakespeare's poetry and drama from different perspectives: as literary text, as dramatic performance, and as adaptation across genres and cultures. Students are introduced to the social, cultural and historical contexts of Shakespeare's writing and explore the major themes addressed in his work. Further, students are invited to consider historical and contemporary stagecraft as well as adaptations of his work across different media and in different cultural contexts. Students are required to participate in readings and performances of scenes from the plays, and to engage with the critical heritage of Shakespearean studies.

ENG3363 CLASSICAL MYTHOLOGY IN ENGLISH

(3 units)

Pre-requisite(s): None

Course Description: 1) To develop a knowledge of the tradition of classical mythology and its influences on English literatures and popular cultures in various historical periods. 2) To enhance critical reasoning and interpretive skills by exploring the classical mythology in terms of how it is creatively used and adapted in different social and cultural contexts. 3) To strengthen overall English proficiency and cultural literacy of Western civilization by reading, discussing, performing, and writing about classical mythology.

ENG3373 FEMINIST READINGS OF LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: 1) To explore gender-related issues through a variety of critical and theoretical lenses, such as male and female essentialism, and poststructuralist feminism. 2) To evaluate the work of specific female writers and their contribution to the development of literature and literary scholarship.

ENG3383 THE ART OF READING FICTION

(3 units)

Pre-requisite(s): None

Course Description: 1) To explore various forms of narrative fiction in literature; 2) To analyze literary devices used in the selected texts; 3) To examine the observance and subversion of literary conventions in different genres; 4) To assess literature and its impact on society.

ENG3393 LITERATURE AND FILM

(3 units)

Pre-requisite(s): None

Course Description: 1) To introduce the student to the critical study of literature and film. 2) To equip the student with the skills and subject knowledge needed for successful literary and film study at the degree level. 3) To enhance reasoning and analytical skills through close readings of literary and film texts, and writing assignments which focus on contemporary cultural approaches to criticism. 4) To strengthen oral communication through focused group discussions, presentations, and collaborative projects.

ENG3913 WOMEN WRITING AND WRITING WOMEN

(3 units)

Pre-requisite(s): None

Course Description: This course aims: 1) To enhance overall English proficiency through reading, writing, classroom presentations, and in-class discussions; 2) To develop a knowledge of women's writing in Anglo-American literature traditions; 3) To acquire critical vocabulary of literary analysis from gender studies, postcolonialism, and critical race theory; 4) To understand the cultural and historical contexts of literary texts.

ENG4013 MAJOR AUTHOR STUDY

(3 units)

Pre-requisite(s): None

Course Description: This course will focus on a single prominent fiction writer, dramatist, or poet, presenting the work in the author's biographical, historical, and critical contexts. Readings will include a representative selection of the author's works plus secondary critical and historical materials as appropriate to the author chosen.

ENG4023 MAJOR GENRE IN LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: This is a focused examination of one particular genre and its attendant sub-genres. For example, these genres could include magic realism, detective fiction, science fiction, Theatre of the Absurd, or historical fiction. Students are required to consider the various ways that texts can be understood in relation to established modes of expression and/or audience expectations. By examining the defining features of genres and sub-genres, students gain valuable knowledge about literary and cultural contexts, while at the same time developing interpretive strategies for reading texts in terms of their larger social significance.

ENG4053 CREATIVE WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course will develop creative writing skills and creative aptitude by allowing students to explore diverse genres, including poetry, fiction, non-fiction, and drama. In addition to gaining experience and confidence in writing, students will develop an appreciation for the ways in which language, identity, and personal growth connect. Above all, students will come to understand that writing is a process which involves revision and careful editing. By presenting their work to the class on a regular basis, speech and presentations skills will be refined.

ENG4063 OFF-CAMPUS INTERNSHIP EXPERIENCE

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing

Course Description: This course aims to explore the fields of literature and creative and professional writing through engagement in carefully designed service learning opportunities in teaching, publishing, and professional and technical writing amongst other fast-growing careers.

ENG4103 FINAL YEAR PROJECT I (ELLS)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing

Course Description: The Final Year Project (FYP) is a capstone that brings together academic and professional skills acquired in the programme. Under the guidance of a supervisor, the student will identify a suitable research or portfolio topic; find research materials; narrow the topic; read, evaluate, and interpret materials; write, edit, and polish, and, finally, document and present the work.

ENG4123 INTRODUCTION TO PUBLISHING STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course is devoted to the content-related aspects of the publication process so as to prepare students to take the Editing and Publishing Practicum, which focuses on the production-related aspects of the publication process. The final product of Introduction to Publishing Studies will be a web-based version of the final print product to be completed in the Editing and Publishing Practicum. The students will be asked to select literary and/or non-literary content from student submissions, determine a theme for the magazine, revise and edit submissions, and use practical skills to create a web-based version of the magazine. Further, the students will demonstrate through a research project their knowledge of the publishing industry, including developments in critical and editorial assessment tools and in publishing standards.

ENG4133 RESEARCH SKILLS IN LITERARY STUDIES

(3 units)

Pre-requisite(s): ENG2173 AMERICAN LITERATURE: TRADITIONS OF DEMOCRACY AND DISSENT

Course Description: The course seeks to guide students of literature in English in the development of the skills needed to conduct research in literary studies. Students will be given the opportunity to adapt these strategies and tools to diverse modes of verbal and written communication. Students will further be engaged in scholarly conversations on research in literary studies and on several inter-connected areas including critical theory, literary interpretation, research methods, and analytical writing. The course presents a solid preparation for those who are about to undertake a final year project and for those students wishing, as well, to pursue post-graduate study in a variety of disciplines and/ to enhance their appreciation of research as a life long endeavour.

ENG4143 FINAL YEAR PROJECT II (ELLS)

(3 units)

Pre-requisite(s): ENG4103 FINAL YEAR PROJECT I (ELLS)

Course Description: Students will complete the project that they started in ENG4103 Final Year Project (FYP) I. This project (FYP II) is geared for the students who have shown the capacity for strong academic or professional work. Students will meet their supervisor during the semester in order to discuss progress. During the meetings, the students should bring in evidence, documenting progress. At the end of the semester all FYP II students will sit for an oral defense, which will involve a presentation and question-and-answer period with at least two faculty members.

ENG4153 EDITING AND PUBLISHING PRACTICUM

(3 units)

Pre-requisite(s): None

Course Description: The course will be devoted to the production-related aspects of the publication process. Herein, the students will work on the production phase of the print-based publication, including the design, layout, and production of a professional quality publication. The students will be asked to conduct smaller-sized projects, using technology in order to diversify their knowledge of production-related print and online technology related to the publishing industry. Students will work collaboratively to delegate tasks and apply skills acquired in Editing and Publishing Practicum to produce a professional quality printed magazine publication.

ENG4173 CURRENT ISSUES IN ENGLISH STUDIES

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing

Course Description: This course aims to afford advanced students in English Language and Literature Studies the opportunity to conduct in-depth study of topics of English language, literature or creative writing through traditional and applied research. The

students are expected to develop a critical understanding of the applications of inter-disciplinary studies to engaging with and to developing innovative solutions to real-world problems.

ENG4183 RESEARCH SKILLS IN DIGITAL COMMUNICATION AND LITERACY

(3 units)

Pre-requisite(s): ENG2143 NEW MEDIA LITERACIES
Course Description: This course aims to develop students' ability to critically review current research in the fields of digital communication and literacy; develop a basic understanding of qualitative and quantitative research skills; develop basic research skills in data collection and analysis; and prepare students to undertake research independently in the fields of digital communication and literacy.

ENG4183 RESEARCH SKILLS IN DIGITAL LITERACY AND INTERCULTURAL COMMUNICATION

(3 units)

Pre-requisite(s): ENG2143 NEW MEDIA LITERACIES
Course Description: This course aims to: 1. develop students' ability to critically review current research in the fields of digital communication and literacy; 2. develop a basic understanding of qualitative and quantitative research skills; 3. develop basic research skills in data collection and analysis; 4. prepare students to undertake research independently in the fields of digital communication and literacy.

ENG4193 FINAL YEAR PROJECT (ELLS)

(6 units)

Pre-requisite(s): None
Other Condition(s): Year 4 standing
Course Description: The Final Year Project is a year-long capstone project that brings together academic and professional skills acquired in the programme. Under the guidance of an advisor, the student will identify a suitable research or portfolio topic; find research materials; narrow the topic; read, evaluate, and interpret materials; write, edit, and polish, and, finally, document and present the work.

ENG4203 GLOBALISATION, MEDIA AND INTERCULTURAL COMMUNICATION

(3 units)

Pre-requisite(s): ENG3083 LANGUAGE AND ETHNOGRAPHY
Course Description: 1. Demonstrate a thorough understanding of the three main themes of the course unit: identity, othering, and representation in the contexts of intercultural communication; 2. Develop an understanding of critical and analytical approaches in the fields of intercultural communication; 3. Demonstrate a good ability to design and conduct research in the field of intercultural communication, analyze and interpret findings in relation to previous literature, and present the research project in both oral and written formats; and 4. Develop sophisticated skills to demonstrate intercultural awareness and sensitivity, especially with regard to cultural representation and its role in intercultural communication.

ENG4213 SPECIAL TOPIC IN LITERATURE

(3 units)

Pre-requisite(s): None
Course Description: 1) To develop cultural literacy by introducing a special topic related to the research interests of the instructor. 2) To enhance critical reasoning and interpretive skills by reading literature and writing on a special literary topic. 3) To strengthen oral communication through focused group discussions, presentations, and collaborative projects.

ENG4223 INTERCULTURAL COMMUNICATION IN THE WORKPLACE

(3 units)

Pre-requisite(s): ENG3203 INTERCULTURAL COMMUNICATION
Course Description: 1. Demonstrate a thorough understanding of cultural diversity in the workplace and a dialectical approach to intercultural business communication; 2. Develop an understanding of the effective use of English as a business lingua franca and non-verbal languages in the context of intercultural business communication; 3. Demonstrate a good ability to design and conduct research in the field of intercultural business communication and present the group project in both oral and written formats; and 4. Develop a practical understanding of the main challenges in intercultural business communication and abilities to effectively solve the problems in the global workplace.

ENGI2003 MECHANICAL ENGINEERING AND PRACTICE

(3 units)

Pre-requisite(s): None
Course Description: This course gives an overview of the major fields of mechanical engineering, such as design, production, theory of machines, solid mechanics, fluid mechanics and thermal and energy systems. It prepares students to master the basic concepts of mechanical engineering, to handle the basic theory of general mechanical engineering; to make elementary calculations of ideal gases and steam; to understand and appreciate significance of mechanical engineering in different fields of engineering; and the basic methods of dealing with general mechanical engineering problems. The course gives students a chance on the practice of preparing and presenting a scientific design of an engineering system.

ENGI2013 ENGINEERING DRAWING AND AUTOCAD PRACTICE

(3 units)

Pre-requisite(s): None
Course Description: This course helps students to understand the basic principles of engineering drawing. Students will learn how to take data and transform them into graphic drawings, and how to use freehand and appropriate computer software for drafting and technical drawing.

ENV1003 CLIMATE CHANGE

(3 units)

Pre-requisite(s): None
Course Description: This course aims to provide students the fundamental understanding of climate change, which is a complex global environmental issue, by explaining the scientific evidence of climate change and evaluating the impacts of climate change on the

natural environment and human societies. Fundamentals of climate change policies and abatement technologies will also be introduced and evaluated to widen students' perspectives in combating this emergent issue. In addition, through this course students will learn how to contribute their own effort as a global citizen to solve the problem together.

ENV1013 INTRODUCTION TO ECO-CITIES

(3 units)

Pre-requisite(s): None

Course Description: This interdisciplinary course is designed to enable students to apprehend the intricate relationships between economic growth, pollution and environmental health. This course also aims to broaden the students' perspectives on how economics, cultures, educations, environmental policies and ethics contribute to the planning of eco-cities. Case studies will also be used to help students to analyse and apply the concepts and theories of eco-city. Upon completion of the course, students should be able to comprehend the importance of sustainable development and engage in innovative thinking on current environmental issues in preparing them to plan and construct eco-cities.

ENV1023 INTRODUCTION TO PLANET EARTH SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course provides students the general information about structure, constituent of the Planet and Earth relating to their processes; introduces the earth's dynamic and changing environment, and the application of geologic information to the entire spectrum on interactions between people and the physical environment; and helps to equip students with an understanding of the interactions between geologic processes, ecological processes and society, and how Earth system interacts with major environmental problems.

ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1. provide students with the basic knowledge of environmental science and a solid foundation of various environmental problems at present, to raise their awareness of pressing environmental issues and to emphasise the importance of sustainable development; 2. introduce basic principles and concepts, such as biodiversity and conservation, physical resources and environmental systems in environmental science; 3. demonstrate how environmental issues, such as pollution and food shortage, which are considered a result of increased human population, are affecting to our everyday life.

ENV1053 INTRODUCTION TO ENVIRONMENTAL SCIENCE LABORATORY

(3 units)

Pre-requisite(s): None

Co-requisite(s): ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course is a multidisciplinary course within biology, chemistry, physics, basic hydrology, energy, geography, and environment suitable for all students in science and technology who have no background in Environmental Science. Students will need to conduct and/or design scientific experiment and gain hands-on activities in natural science. Students will handle fundamental research skills including basic training in hypothesis development, experimental design, basic experimental skills, desktop study, data collection, perform field observation, and academic writing skills though lectures, field trips and hands-on experiences. At the end, students have to gain the experience to design a creative scientific research in natural science.

ENV2003 INTRODUCTION TO ENVIRONMENTAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: The course introduces students to the basic principles, concepts, and issues in environmental science, and demonstrates to them how environmental issues and resources problems are interrelated. Emphasis is given to those topics that demonstrate how environmental issues are related to our everyday life. Students should be able to understand how human activities cause environmental pollution problems, and recognise how modern environmental technologies could remedy such problems.

ENV3003 RESOURCES AND THE ENVIRONMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to help students relate scientific principles to the management of natural resources. Topics include management of natural resources in terrestrial and aquatic ecosystems. It introduces the nature of each natural resource and the scientific and ecological basis for their management, and cultivates positive attitudes relative to natural resource perception, use, management and protection.

ENV3013 SUSTAINABLE ENVIRONMENTAL MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course introduces and discusses global environmental issues, and examines various approaches in tackling them by working out sustainable scientific solutions. Specifically, the course (1) develops a broad framework (incorporating scientific, social, economic and political factors to analyse and resolve environmental problems); (2) provides an understanding of the importance of the role of science and scientific information in environmental management; and, (3) discusses the anthropogenic causes of environmental degradation and the way sustainable growth can be brought about by environmental management. It examines the framework of environmental planning and management, and the techniques for tackling environmental management; and applies principles of environmental science to help manage the diverse array of environmental problems in different physical, biological and social environments.

ENV3023 ENVIRONMENTAL CHEMISTRY AND POLLUTION CONTROL

(3 units)

Pre-requisite(s): CHEM2023 PRINCIPLES OF CHEMISTRY or CHEM2003 GENERAL CHEMISTRY

Course Description: This course describes the sources, transport,

reactivity and sink of contaminants in the environment, together with various technology options used for pollution control. It discusses the fundamental principles underlying the origins, effects and consequences of pollutants and pollution control which serves as a basis for the study of other environmental subjects such as environmental analysis and environmental management.

ENV3033 ENVIRONMENTAL ANALYSIS AND MONITORING

(3 units)

Pre-requisite(s): CHEM3013 CHEMICAL ANALYSIS

Course Description: This course deals with methods and techniques used in the analysis of atmospheric, terrestrial and aquatic pollutants in the environment. It introduces students to various indicators of environmental quality and pollutant analysis and monitoring techniques applicable to water, air and soil samples. Environmental modelling and its application to the evaluation of toxicity are also discussed and covered.

ENV3043 ENVIRONMENTAL STUDY LABORATORY

(3 units)

Pre-requisite(s): BIOL2103 BIOLOGY AND ECOLOGY LABORATORY or
CHEM2053 CHEMISTRY LABORATORY

Course Description: The practical sessions consist of experiments that utilise the techniques commonly used in environmental studies. The course illustrates the theoretical background of the subject and provides students with practical experience in biological and chemical treatments of waste and microbial conversion of biomass or organic waste. Students are trained in the basic principles and techniques for sampling and sample treatment; analytical techniques including physical, chemical and biological techniques, for environmental investigations; and practical experience in treatment methods for removal of environmental contaminants.

ENV3053 ENVIRONMENTAL NANOTECHNOLOGY

(3 units)

Pre-requisite(s): CHEM2023 PRINCIPLES OF CHEMISTRY or
CHEM2003 GENERAL CHEMISTRY

Course Description: This course is designed to provide students with both theory and practice on modern techniques in nanotechnology and nanomaterial including synthesis, characterisation and application. The course aims to provide good academic foundation in the areas of nanotechnology and nanomaterial. It intends to give a deep knowledge of fabrication and characterisation of nanostructures to meet the emerging demands of nanotechnology professionals and will prepare the participants for a successful career in the nanoscience and nanotechnology.

ENV3063 INTRODUCTION TO ENVIRONMENTAL GEOLOGY

(3 units)

Pre-requisite(s): CHEM2023 PRINCIPLES OF CHEMISTRY or
CHEM2003 GENERAL CHEMISTRY

Course Description: The course provides students the opportunity to learn the geological structure, and the constituent of the Earth relating to its natural processes; help equip students with an understanding of the interactions between geologic/ecological processes and the society, the earth's dynamic and changing environment, the application of geologic information to the entire spectrum of interactions between people and the physical environment; and help students appreciate how geology interacts with major environmental problems facing people and society.

ENV3073 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS FOR ENVIRONMENTAL MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the fundamentals of Geographic Information Systems (GIS) with an emphasis on how the vector data model is used to assess and analyse environmental problems. After providing a brief overview of vector GIS concepts and applications, students will examine vector data structure, and vector data acquisition, with a focus on Global Positioning Systems (GPS) and database creation, management, and manipulation. In addition, students will learn the basics of geocoding, network application and map construction to explore and analyse environmental problems.

ENV3083 FUNDAMENTALS OF BIOGEOCHEMISTRY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide a comprehensive view of biospheres' processes, in all their complexity and interconnection with each other. The course will present the basic methodological principles of biogeochemistry, which allows to navigate in the variety of scientific information and better understand the principles of decision-making in the field of environmental protection.

ENV3093 TERRESTRIAL AND AQUATIC ENVIRONMENTS IN CHINA

(3 units)

Pre-requisite(s): BIOL1023 DIVERSITY OF LIFE AND LABORATORY, and
BIOL2023 CONSERVATION ECOLOGY

Course Description: This course provides students with a broad and general understanding of the characteristics of various major and typical terrestrial (forests and grasslands) and aquatic (lakes, rivers, coastal areas, and wetlands) ecoregions in China. The past and present characteristics of Chinese ecoregion such as distribution, geographical location, biodiversity, and natural resources will be examined. Moreover, students will learn the principles of most up-to-date technologies in mapping and studying ecoregions. Finally, students will identify the stressors and sustainable solutions as well as apply ecosystem-based approach for the management of ecoregions.

ENV3103 INTRODUCTION TO ENVIRONMENTAL ENGINEERING

(3 units)

Pre-requisite(s): ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course introduces the crucial principles of environmental engineering particularly engineering decision-making, engineering calculation, energy and material balances, basic engineering drawings and modelling as well as fundamental engineering designs useful in environmental problem-solving. Upon completion of the course, students will have

a better understanding of the practical aspects of environmental science and will be able to exercise them in solving real-life environmental problems by performing basic designs.

ENV3113 CHINA'S ENVIRONMENTAL LAW AND INTERNATIONAL COOPERATION POLICY

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with a basic and board understanding of law as an important and essential instrument in environmental management. The course will address how China formulates environmental policies, laws and regulations for governing the environment and natural resource utilization. In addition, students will learn the challenges and opportunities of some common multilateral environmental treaties and regional cooperation regimes to China. Finally, the course will help students to learn the application of environmental legal instruments in governing the environment and its sustainable development in China.

ENV3123 INTRODUCTION TO OCCUPATIONAL HEALTH AND SAFETY

(3 units)

Pre-requisite(s): None

Course Description: This course imparts crucial principles of hazard identification, risk assessment and risk control to enable students to understand and practice them for management occupational health and safety. It provides a solid foundation to Environmental Science students on the identification of various types of hazard at workplaces, which typically encompass physical, chemical, biological and psychosocial hazards; confers the necessary knowledge and skills to differentiate risks from hazards, assess the risks using established methods and control the risks to levels as low as reasonably practicable by referring to the hierarchy of risk controls.

ENV3153 RESEARCH METHODS FOR ENVIRONMENTAL SCIENCE AND STUDIES

(3 units)

Pre-requisite(s): ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course to provides the theoretical and practical knowledge required by Environmental Science students to undertake independent research. This course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative, and mixed methods approaches. The course will also address conceptual and technical aspects of research, as well as phases of the research process, with an aim to guide students during the preparation of their research proposals, dissertations and projects.

ENV3163 ATMOSPHERIC SCIENCE AND POLLUTION

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with the knowledge in atmospheric photochemistry, chemistry of the stratosphere, troposphere and the atmospheric aqueous phase, atmospheric aerosols, atmospheric chemistry and climate, air pollution control philosophies and strategies. It offers students a more in-depth study of topics in atmospheric chemistry and physics that are relevant to pollution, and the application of this knowledge in understanding major atmospheric pollution problems.

ENV3173 HYDROLOGY AND WATER ENGINEERING

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with in-depth knowledge in hydrology and water engineering. It introduces the fundamental hydrology and its application in landscape and ecological system; and the technologies for the supply of drinking water, surface water and wastewater engineering and management.

ENV3183 PRACTICAL ENVIRONMENTAL ANALYSIS AND MONITORING

(3 units)

Pre-requisite(s): CHEM3013 CHEMICAL ANALYSIS

Course Description: This course introduces the principles, techniques, and methodologies for performing environmental analysis and monitoring; provides students with the knowledge to analyse environmental problems, apply analytical and instrumental techniques to evaluate the situations, and to develop skills and knowledge to solve problems; and equips students with the ability and knowledge to pursue more advanced courses in environmental science

ENV3193 CARBON TECHNOLOGY AND RENEWABLE ENERGY

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce to students (i) power transmission and energy storage technologies; (ii) energy conservation technologies; (iii) source and estimation of carbon emission; (iv) carbon capture and storage (CSS) technologies; (v) carbon conservation, usage and sink. Students will learn how energy is transmitted, stored and efficiently supplied to people. This course will also demonstrate the global carbon situations and related latest technologies, which covers carbon storage, conservation, usage and sink. It will also enable the students to handle related cost management skills in energy and carbon managements.

ENV4003 GREEN BUSINESS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: Green Business Management examines the role of business in reducing the burden on the natural environment, and the impacts on profit and the environment in adopting new management approaches. The economic growth and the environmental impacts, and how to mitigate them, are the major focuses of the course. The contents include the greening of business at all stages - from the management, production to product. The students are introduced to various conflicting ideas regarding economic development and environmental degradation, and whether the technological advances hold the key to saving the environment.

ENV4004 FINAL YEAR PROJECT I (ENV)

(3 units)

Pre-requisite(s): None

Course Description: This is a semester long individual project on an interdisciplinary or applied topic related to the field of

environmental science, utilising knowledge and skills acquired in this programme and beyond. Assessment is based on a thesis and an oral presentation upon completion of the project. The course guides students in the development of research methodology appropriate to the practice of environmental technology and management. The project gives the students opportunity to work on problems of an applied or interdisciplinary nature that has real-world significance.

ENV4005 FINAL YEAR PROJECT II (ENV)

(3 units)

Pre-requisite(s): ENV4004 FINAL YEAR PROJECT I (ENV)

Course Description: Please read the course description of ENV4004. This course is for students who wish to carry out more in depth research for their final year projects. To enrol in this course, students must have a satisfactory report for ENV4004 and the approval of the Programme Director.

ENV4013 INTEGRATED SOLID WASTE MANAGEMENT

(3 units)

Pre-requisite(s): ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course provides an understanding of solid waste problems, waste generation, handling, and treatment with the emphasis on recycling. The course will include the study of the waste generation scenarios in developed and developing countries with special reference to waste generation in China. It will discuss the various waste treatment technologies, their pros and cons and the success stories. The emphasis will be on how to reduce solid waste and various issues such as producer responsibility, polluter pays, etc. The resource conservation using the three "R"s and the role it plays in the integrated waste management scenario will be emphasised in order to: (1) to understand the origins of waste and the social, political and economic issues involved with waste disposal; (2) to review the waste generation problem and to examine various physical, chemical and biological waste treatment methods; (3) to introduce the various technologies in reducing and reutilising the various types of wastes; and (4) to have a comprehensive knowledge of the current and projected legislation regarding waste and their potential implications.

ENV4023 ATMOSPHERIC SCIENCE AND POLLUTION

(3 units)

Pre-requisite(s): None

Course Description: This course is devoted to a more in-depth study of topics in atmospheric chemistry and physics that are relevant to pollution and the application of this knowledge in understanding selected major atmospheric pollution problems. These topics include atmospheric photochemistry, chemistry of the stratosphere, troposphere and the atmospheric aqueous phase, atmospheric aerosols, atmospheric chemistry and climate, air pollution control philosophies and strategies.

ENV4033 LAND CONTAMINATION AND REMEDIATION

(3 units)

Pre-requisite(s): BIOL2023 CONSERVATION ECOLOGY, and ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course aims to provide the students with a general understanding of the pathways of soil contamination, the most important groups of inorganic and organic chemical contaminants, the sources and key properties which affect their fate in soils, their availability to plants and their toxicity to humans and ecosystems. Various forms of land contamination and the various traditional as well as modern technologies being used to remedy the contamination will be discussed. Specifically, the course provides an understanding of how human activities have led to an increase in the load of contaminants in the land; the pathways of soil contamination; and the various physical, chemical and biological treatment technologies.

ENV4043 SELECTED TOPICS IN ENVIRONMENTAL SCIENCE

(3 units)

Pre-requisite(s): ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course provides updated information in recent advances and developments in selected areas in environmental science and technology.

ENV4053 WATER SCIENCE AND ENGINEERING

(3 units)

Pre-requisite(s): BIOL2023 CONSERVATION ECOLOGY, and ENV2003/ENV1043 INTRODUCTION TO ENVIRONMENTAL SCIENCE

Course Description: This course aims to equip students with in-depth knowledge in water chemistry and engineering. New technologies associated with wastewater treatment and advanced industrial wastewater treatment will be discussed. These topics include the equilibrium partitioning between organics and in-organics in the environment, and their fate in the aquatic system. Engineering technologies for the supply of drinking water and wastewater treatment are introduced in this course.

ENV4063 INTRODUCTION TO ISO GENERIC MANAGEMENT SYSTEMS (ISO9001 & ISO14001) AND AUDITING

(3 units)

Pre-requisite(s): None

Course Description: This course gives an introduction in three main areas: ISO9001 standard, ISO14001 standard and auditing. ISO9000 and ISO14000 families are among the most widely known standards of the International Organisation for Standardization (ISO). They are generic management system standards, which can be applied to all types and sizes of organisation. ISO9000 family has become an international reference for quality management requirements in business operation. The ISO14000 family functions as practical tools for any organisation to provide assurance on environmental issues to external stakeholders. Auditing functions as a management tool for monitoring and verifying the successful implementation of an organisation's quality and environmental policy. In addition to the elaboration of the requirements of the relevant International Standards, case studies will be used to facilitate discussion.

ENV4083 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS FOR SUSTAINABLE ENVIRONMENT

(3 units)

Pre-requisite(s): ENV3073 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS FOR ENVIRONMENTAL MANAGEMENT

Course Description: This course aims to provide students with advanced analytical and practical skills in Geographic Information Systems (GIS), spatial analysis and Remote Sensing (RS) techniques, with an emphasis on how these skills are used to assess and analyze environmental problems. This course will present a complete range of GIS problem-solving and analytical issues, and guide students to develop GIS and RS skills necessary for diverse application scenarios, especially in the field of environment science, environmental management and sustainable development. This course also presents the basic technical and methodological skills needed to employ various types of remotely sensed data as a source of quantitative information selected topics such as (but not limited to) in geography, including urban planning, landscape ecology, recreation resource management, wildlife management, and others.

ENV4073 INTERNSHIP IN ENVIRONMENTAL SCIENCE AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide and develop students' real working experience on Environmental Science and Environmental Management outside the UIC campus at a host organization which has related nature of work, daily operations, or business activities. Students will be assigned to work in a designated environmental-related organization such as governmental department, public institution, non-governmental organization, academic and/or research institution, consultancy company, commercial laboratory, or any other organization/company which has implemented environmental technology and management. During the intern period, students are expected to apply their professional knowledge gained in the College into a real situation; in addition, students are expected to develop their professional working attitude, ethics, communication skill, team working tactic, and any other specific skills at the host organization in real situation.

EPIN3003 MANAGING NEW BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: You have a business plan—now what? Most businesses fail within the first five years of start-up, and this is not due to a lack of effort on the part of the founders. This course will focus on the issues that founders encounter when they attempt to implement a business plan and turn an idea or model into a going concern. These issues include, but are not limited to: formulating a viable business model, determining location, determining scale and scope of family business and succession problems, human resources management issues specific to new businesses. We will also explore some contemporary and novel issues in new ventures such as the lean start-up method for new businesses.

EPIN3013 ENTREPRENEURIAL FINANCE

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: The primary objectives of this course are to (1) understand the concepts, features and institutions involved in entrepreneurial finance and private equity markets; the organising and operating of new venture; and the financial and non-financial performance measures; (2) evaluate ways ventures can be financed; (3) value new ventures based on risk assessment, and how the financial valuation and deal structure can affect the development of the business, the management team and the shareholders; and (4) develop turnaround and exit strategies.

EPIN3023 MARKETING FOR ENTREPRENEURS

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: The objective of this course is to introduce students to the key concepts of marketing with relevant to entrepreneurship in the start-ups and growing process of their enterprises, and their application in contemporary dynamic business environment. Focuses are put on marketing strategies, which are suitable for small business with limited marketing resources.

EPIN3033 ENTREPRENEURIAL DECISIONS AND COMPLIANCE

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I, and
ACCT2013/ACCT2053 PRINCIPLES OF ACCOUNTING II

Course Description: Introduce and develop the quantitative skills that entrepreneurs will need to reinforce their visceral qualitative approaches to decision-making during the venture life-cycle from initial development, through organising, operating and survival, to consolidation. The skills revolve around the financial concepts of cash, risk and uncertainty, constraints, opportunities and alternatives, and performance. In addition, regulatory compliance is essential for legitimate operation of the venture. The laws and regulations on business vehicles, intellectual property, franchising, corporate governance, tax and financial reporting are also covered.

EPIN3043 NEW PRODUCT AND INNOVATION MANAGEMENT

(3 units)

Pre-requisite(s): EPIN3003 MANAGING NEW BUSINESS

Course Description: The objective of this course is to familiarise students with the concepts and practices in the creation, development, design, marketing, and launching of new products and services. The knowledge and skills gained will allow students to make informed decisions about which new products to make or what services to offer, and what strategies and development processes to implement. Identifying opportunities, developing strategies, and designing processes for the creation of new products/services are key responsibilities for both entrepreneurs inside and outside successful enterprises. However, developing new products/services is fraught with several risks, which lead to failures of many products/services introduced into the market. This course is focused on improving the chances of success for new

products/services.

EPIN3053 LOGISTICS AND TRANSPORTATION MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: Logistics was originally a military term. Traditionally, logistics means the organised movement of goods, services, information and people from the point of origin to the point of consumption. The scope of logistics has been growing rapidly since the last few decades with the advance of technology. It has also been estimated that logistics costs account for one third of the cost of doing business. Effective logistics management is hence crucial for the success of the company. This course introduces logistics and distribution management and aims at providing students with a full understanding of business logistics management, transport, inventory and distribution systems.

EPIN3063 DIGITAL INNOVATION AND TRANSFORMATION

(3 units)

Pre-requisite(s): None

Course Description: This course will help you understand why digital technologies are at the forefront of enterprise innovation and entrepreneurship. Through understanding the digital paradigms and best management practices of innovation and digital technology across various industries, this course further navigates how incumbent and entrepreneurial firms can transform through strategic digital initiatives and business design to ensure future survival and competitiveness. You will acquire a framework for recognizing digital disruption that undermine traditional business performance and understanding what makes for successful digital business transformation. You will acquire knowledge and skills about how to create and capture value during the digital innovation process. You will develop your competence in analyzing and designing digital business models, digital innovations, and digital strategies. You will also be equipped with the managerial mindsets, techniques, and tools that are used to understand how innovative digital solutions are designed, created, and delivered.

EPIN4003 CORPORATE ENTREPRENEURSHIP

(3 units)

Pre-requisite(s): EPIN3003 MANAGING NEW BUSINESS

Course Description: The purpose of the course is to introduce students to corporate entrepreneurship principles and concepts. It will prepare students with the capabilities to:

1) Identify and define key concepts in the corporate entrepreneurship area;
2) Apply entrepreneurial skills and approaches within an organisation;
3) Develop innovative and entrepreneurial organisations;
4) Create new venture within the organisation.

EPIN4013 GLOBAL AND SOCIAL ENTREPRENEURSHIP

(3 units)

Pre-requisite(s): None

Course Description: There are two main objectives of this course. The first objective is to introduce students to the concepts and practice of taking entrepreneurship global in the emerging markets as well as in advanced economies. The objective is to explore the special problems and advantages relevant to startups and entrepreneurial small and medium firms in a global context. The second objective of the course is to heighten students' awareness of the roles that social entrepreneurs can play in the changing economic and social systems. Social entrepreneurs address problems that the government, private sector, and traditional non-profit sector fail to achieve systemic impact. Social innovations are new strategies, concepts, ideas and organizations that meet the social needs of different elements which can be from working conditions and education to community development and health - they extend and strengthen civil society. The course considers the full spectrum of social business models, including strictly non-profit organizations, enterprises developing revenue-generating products or services for a social goal, and socially responsible for-profit companies. Students will be introduced to the concept of social entrepreneurship while exploring the many mechanisms for and barriers to achieving social impact. The course topics include design thinking, strategic planning, project management, teamwork, fundraising, marketing, leadership, and project sustainability. The course also requires students to confront issues of power and privilege, develop awareness of their strengths, and think about how these factors combine to achieve impact.

EPIN4023 ENTREPRENEURIAL INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to provide students the opportunity to better understand the entrepreneurial process. Under the guidance of faculty and business owners, students will be guided to complete a work assignment of no less than 150 hours, to be either paid or non-paid to learn successful entrepreneurial experiences in preparation for a business plan or to create an enterprise with the potential to grow globally.

EPIN4033 TECHNOLOGY AND INNOVATION STRATEGY

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to meet the needs of future managers, entrepreneurs, consultants and investors who must analyze and develop business strategies in technology-based industries. Firms in such industries compete through technological innovations and face significant uncertainty with respect to emerging technologies and business models. The emphasis in the course is on learning conceptual models and frameworks to help navigate the complexity and dynamism of technological innovation.

FIN2003 FINANCIAL MANAGEMENT

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I or
ACCT2033 INTRODUCTION TO FINANCIAL ACCOUNTING (FOR NON-MAJOR STUDENTS) or
ACCT2063 FUNDAMENTAL ACCOUNTING PRINCIPLES

Course Description: The objective of this course is to enable students to (1) understand the fundamental concepts in finance; (2) assess alternative investment possibilities; and (3) evaluate different sources of financing projects.

FIN2013 FINANCIAL PLANNING AND INVESTMENT ANALYSIS

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with an understanding of basic investment products and financial planning techniques commonly used today. Various investment products will be introduced in this course, such as common stocks, fixed income securities, unit trust, derivatives, etc. Particular attention is given to forming a sound and executable financial plan.

FIN2023 FINANCIAL MANAGEMENT

(3 units)

Pre-requisite(s): ACCT2003/ACCT2043 PRINCIPLES OF ACCOUNTING I or
ACCT2033 INTRODUCTION TO FINANCIAL ACCOUNTING (FOR NON-MAJOR STUDENTS) or
ACCT2063 FUNDAMENTAL ACCOUNTING PRINCIPLES

Course Description: (For non-ACCT students.) The objective of this course is to enable students to (1) understand the fundamental concepts in finance; (2) assess alternative investment possibilities; and (3) evaluate different sources of financing projects.

FIN3003 BANKING AND CREDIT

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course aims at providing students with a general understanding of the banking industry and the importance of an efficient banking industry to the working of a market economy. It examines the structure of the banking industry, the role of the central bank, and the basic functions of commercial banks. Recent developments of banking regulations and capital adequacy will be discussed, particularly the Basel II and the CAMELS rating of the U.S. This course also discusses the products being offered by the banks and the methods in analysing the performance of a typical commercial bank, as well the credit analysis and credit control of bank customers.

FIN3013 CORPORATE FINANCE

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course addresses the advanced topics in financial management. It offers students an opportunity to examine the theory of corporate finance and the role in leading practitioners towards sound financial decisions.

FIN3023 FIXED INCOME SECURITIES

(3 units)

Pre-requisite(s): FIN3033 INTRODUCTION TO FUTURES AND OPTIONS MARKETS

Course Description: This objective of this course is to enable students to (1) explore various fixed-income securities and the methods for analysing them; and (2) discuss interest rate related derivative instruments and how to use these contracts to modify the exposures and enhance the yields of the fixed-income portfolios.

FIN3033 INTRODUCTION TO FUTURES AND OPTIONS MARKETS

(3 units)

Pre-requisite(s): FIN3043 INVESTMENT MANAGEMENT

Course Description: This objective of this course is to enable students to (1) understand the fundamentals of derivatives such as futures, options, etc.; and (2) explore theoretical as well as practical aspects of these topics.

FIN3043 INVESTMENT MANAGEMENT

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course examines the investment environment in Hong Kong, the basic principles of valuation of financial assets, and the development of portfolio and capital market theories. The purpose is to offer students guidance in the management of financial investments.

FIN3053 MULTINATIONAL FINANCE

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT, and
FIN3033 INTRODUCTION TO FUTURES AND OPTIONS MARKETS

Course Description: This course provides students with knowledge to understand the international financial environment and to analyse and solve financial problems facing multinational firms. All traditional areas of corporate finance are approached from the perspective of multinational corporations.

FIN3063 PRINCIPLES OF CORPORATE FINANCE

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course is designed to provide students with a comprehensive understanding of the principles and practices of corporate finance. It aims to enable students to apply financial principles and theories to the understanding of issues and solving problems in real-world settings independently; and to enable students to understand the financial decision-making practice of corporations under different circumstances and to learn the advanced techniques required for the financial managers.

FIN3073 FINANCIAL MATHEMATICS

(3 units)

Pre-requisite(s): Quantitative Reasoning

Course Description: Fundamental methods for formulating and solving financial models will be developed. Emphasis will be on defining the mathematical structure of problems and on practical computer methods for obtaining model solutions.

FIN3083 FINANCIAL BIG DATA ANALYTICS

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: The objective of this course is to enhance students' conceptual and technical understanding of the applications of big data and their role in the engineering of financial analytics. The emphasis is on providing students with hands-on experience in

managing large datasets within the finance sector. This course encompasses various themes and practical challenges that integrate computer-aided data management, data analysis, and financial issues, as well as their relevance in a data-driven financial environment. Topics addressed include the retrieval of raw data from external files, the creation of permanent SAS datasets, execution of conditional and iterative processing, subsetting and amalgamating SAS datasets, data summarization, frequency counting, the generation of tabular reports, the introduction of the output delivery system, the production of high-quality graphs, and an overview of the SAS macro language. Furthermore, both simple and advanced statistical methods — including t-tests, confidence intervals, linear and multiple regressions, Principal Component Analysis (PCA), and correlation — will be thoroughly examined in the context of big data.

FIN3093 CORPORATE FINANCE

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: (For non-ACCT students.) This course addresses the advanced topics in financial management. It offers students an opportunity to examine the theory of corporate finance and the role in leading practitioners towards sound financial decisions.

FIN4003 MANAGEMENT OF FINANCIAL INSTITUTIONS

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course focuses on the management of financial institutions, such as banks, unit trust companies, and insurance companies using the risk management approach. It provides students with the knowledge and know-how for them to understand the challenges of globalisation international financial institutions face.

FIN4013 FINANCIAL FORECASTING

(3 units)

Pre-requisite(s): Quantitative Reasoning, and FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course introduces students to investment forecasting techniques, which include technical analysis and time series methods. Class lectures will focus on the applications of these methods in forecasting stock prices, earnings, dividends, indices, sales and other economic variables. Students' understanding of the issues arising from practical applications of financial forecasting will be enhanced by participation in case studies.

FIN4023 FINANCIAL RISK MANAGEMENT

(3 units)

Pre-requisite(s): FIN3033 INTRODUCTION TO FUTURES AND OPTIONS MARKETS

Course Description: Initially much neglected by non-financial and financial institutions, risk management has become an increasingly important area of finance and nowadays attracts widespread attention in companies in various business sectors. This course will apply financial risk management methods using concepts from areas such as value at risk, derivatives, hedging and financial engineering. Some of the markets studied include commodities, stocks, bonds, and currencies. Analytical methods to quantity market risks, credit risks as well as operational risks will be covered in this course. This course aims to train future managers to use the framework to actively manage the financial risks their organisations face.

FIN4033 SEMINAR IN FINANCE

(3 units)

Pre-requisite(s): FIN3043 INVESTMENT MANAGEMENT

Course Description: Under guidance of the instructor, students have the opportunity to explore and discuss in this seminar, the latest developments and the major areas of concern in the field of finance.

FIN4043 BUSINESS VALUATION

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: The objective of this course is to introduce essential business valuation concepts, and applications techniques for students to analyse dynamic business environments of a company, interpret companies' business models and financial statements, translate business logics and assumptions into financial forecast, and select appropriate valuation methods to ascertain corporate value. This course aims at helping students to be equipped with the essential techniques required by financial analysts.

FIN4053 FINANCIAL MARKETS IN CHINA

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course is designed to help the students understand the issues faced by firms operating in China, and to deal with them in an efficient way. It examines the structure of financial system, the development of financial market, the regulation of capital market, the management of financial institutions, and the operation of corporations in China. Emphasis is placed on the general environment of financial market in China.

FIN4063 FINANCE INTERNSHIP

(3 units)

Pre-requisite(s): FIN2003/FIN2023 FINANCIAL MANAGEMENT

Course Description: This course aims to provide students an opportunity to gain real-life working experience related to various issues and activities associated with an organization's finance function or an institution in the financial industry. Under the guidance of both faculty and workplace supervisors, students will work in an organization as interns and complete work assignments that are primarily related to the organization's activities related to financial management and/ or operations of a firm in the financial industry. The internship assignment is expected to take up no less than 150 hours to complete plus 12 hours of lecture at the College, and it may or may not be paid for. The internship also provides an opportunity for students to broaden their own experience beyond the limitations of their chosen discipline. Students will be assisted by UIC, but are responsible to find a suitable professional placement. The host organization will nominate a contact person for the student for the internship.

FINM2003 THEORY OF FINANCE

(3 units)

Pre-requisite(s): None

Course Description: The path-breaking advances in finance theory and practice over the past several decades have profoundly changed the financial world. These changes are further accelerated by the extensive globalisation of financial markets and the rapid development in financial technologies in recent years. This course provides an introduction to modern finance theory and its applications within a unified framework.

FINM2013 TIME SERIES FOR FINANCE AND MACROECONOMICS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and MATH1083 CALCULUS II

Course Description: Due to growing importance and relevance of applied time series econometrics in finance and other related fields, the course is designed to help the students to understand the concepts, methods, applications and usefulness of time series analysis to various problems relating to finance. Practical examples from the industry and economy are the hall mark of the course combined with laboratory experiments with the latest software applications. For practical purposes, the course is extremely useful for management professionals working in different sectors and in various positions of decisions making. Upon completing this course, students should be able to master traditional methods of Time Series analysis, intended mainly for working with time series data.

FINM2023 REGRESSION ANALYSIS (FOR FM STUDENTS)

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and STAT2063 PROBABILITY THEORY

Course Description: To provide an understanding of the modern regression analysis and techniques which are useful in data analysis. Regression analysis is one of the most useful statistical techniques. There have been great developments in the past decades such as statistical diagnostics, nonlinear regression, robust regression, nonparametric regression etc. With the help of statistical packages such as MATLAB or R, students can analyse multivariate data by modern regression techniques without any difficulty.

FINM2033 PYTHON FOR FINANCE

(3 units)

Pre-requisite(s): DS1013 PYTHON PROGRAMMING FOR BEGINNERS

Course Description: This course introduces the concepts, principles and techniques of python programming languages and its potential application to finance industry. Students will learn how to write Python programs using control statements, functions, classes, modules. After learning this course, students will know how to edit, debug, run Python programs, which is the fundamental skills for data analytics, algorithm trading, and quantitative finance.

FINM2043 FINANCIAL ENGINEERING

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I

Course Description: Financial engineering is the use of sophisticated mathematical modelling techniques to design, price, and hedge securities and portfolios. The aim and objective of this course is to learn applications of financial engineering, which includes development of derivative pricing techniques, use of derivative securities to reduce or eliminate risk, creation of new financial instruments to meet the changing needs of investors, and estimation of the risk of complex portfolios. Although traditionally concerned with derivative securities, financial engineering techniques are increasingly applied to fundamental securities.

FINM2063 INTRODUCTION TO FINANCE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce the basic concepts & principles of finance for financial mathematics students. It introduces the principles of investment theory, economics of banking & financial institutions, financial statement analysis and other core areas of finance that will build a solid foundation for FM students to pursue other courses in finance.

FINM2073 INTRODUCTION TO PYTHON FOR MATHEMATICAL COMPUTING

(3 units)

Pre-requisite(s): None

Course Description: The course aims to provide college students with a solid foundation in Python programming, emphasizing its applications in computational modeling and scientific computing. Students will explore Python's syntax and features, including control statements, data structures, functions, modules, and essential libraries like NumPy, Pandas, and Matplotlib. Through hands-on practice, they will develop the ability to perform numerical computations, handle data efficiently, and create visualizations, which are crucial skills for solving problems in computational sciences. By the end of the course, students will have the confidence to write, debug, and execute Python programs, empowering them to apply computational tools to real-world challenges in science and engineering.

FINM3003 FINANCIAL MATHEMATICS I (FOR FM STUDENTS)

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and MATH1083 CALCULUS II

Course Description: This course aims to provide students with recent developments in mathematical control theory and its applications to finance, such as application of stochastic control theory in financial economics. In particular, the course addresses a large spectrum of problems and techniques. The objective is to enable student to understand how control theory provides a large set of theoretical and computational tools with applications in finance. Other branches of control theory are found to have comparatively less applications to financial problems and the exchange of ideas and methods have intensified in recent years. This course establishes bridges between these separate fields.

FINM3013 INTRODUCTION TO FINANCIAL DERIVATIVES

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course aims to give an introduction to students on futures, options and other derivative contracts. Class

lectures will be focused on the theoretical aspects of these topics and students could gain understanding of some practical issues relating to these contracts for the market through tutorials and a term project. Tutorials will highlight and examine the application of the knowledge learnt from the lectures.

FINM3023 FIXED INCOME SECURITIES AND THEIR DERIVATIVES

(3 units)

Pre-requisite(s): FINM3093 INVESTMENTS
Course Description: The aim of this course is to provide students with an introduction to the techniques of valuation of fixed income securities and their derivatives as well as management of fixed income investment portfolios. This course focuses on analytic tools used in bond portfolio management and interest rate risk management. These tools include yield curve construction, duration and convexity, and formal term structure models. The course covers the valuation of a wide variety of fixed income securities and derivatives including pure discount bonds, coupon bonds, forwards and options on fixed income securities, interest-rate swaps, floating-rate notes, and mortgages. It also develops tools for valuing and modelling the risk exposures of fixed income securities and their derivatives, with the ultimate goal of deploying these instruments in a corporate or financial risk management setting.

FINM3033 RISK MANAGEMENT IN FINANCE

(3 units)

Pre-requisite(s): None
Course Description: The aims of the course is to deal with the ways in which financial institutions quantify and manage different risks such as market risk, credit risk, and operational risk, to help students pay special attention to the credit derivatives market and understand current financial crisis by covering various smaller case studies.

FINM3043 BEHAVIOURAL FINANCE

(3 units)

Pre-requisite(s): None
Course Description: This purpose of this course is to introduce the student to the new field of behavioural finance. Whereas in the past it was believed that instances of investor irrationality cancelled themselves out rendering markets perfectly efficient, because of advances in behavioural finance this view is being increasingly called into question. New work in this area has major implications for financial decision-makers.

FINM3053 STATISTICS IN FINANCE

(3 units)

Pre-requisite(s): None
Course Description: The purpose of this course is to teach students with basic statistical techniques for analysing and modelling both financial data and problems. The course provides students with tools for measuring financial variables, such as volatility and correlation, and tools for pricing by constructing financial risk models based on financial data. The course also involves some risk management and valuation issues in finance.

FINM3063 INTERNATIONAL FINANCE

(3 units)

Pre-requisite(s): None
Course Description: With the rapid globalisation of the world economy, the managers of a firm have to understand that their decisions will be greatly influenced by variables such as exchange rate policies, trade policies, international accounting standards, etc. The aims of this course are to provide students with a basic knowledge of how international financial markets work; to provide students with an understanding of exchange rates and why currency values fluctuate, the international monetary system; balance of payments; parity conditions; foreign exchange rate determination and forecasting; derivatives; to explore methods used to manage risk in the global markets; to support student learning through site visits financial centres; and to provide an in-depth understanding of the process and techniques used in making international investment decisions.

FINM3073 CORPORATE VALUATION

(3 units)

Pre-requisite(s): ECON2053 ECONOMICS
Course Description: This course aims to teach students different valuation methods from both a conceptual and practical framework. The approach combines both accounting and finance into a practical framework for valuing firms, debt and equity. Although there will be some new finance theories introduced in this course, the emphasis is on the practical application and integration of finance and accounting concepts to valuing companies.

FINM3093 INVESTMENTS

(3 units)

Pre-requisite(s): None
Course Description: This course aims at developing key concepts in investment theories from the perspective of a portfolio manager rather than an individual investor. The goal of this class is to provide students with a structure for thinking about investment theories and show them how to address investment problems in a systematic manner. It focuses on applications of financial theories to investments. Topics include portfolio optimisation and asset pricing theories, as well as their applications to problems in contemporary financial practice. The course also explores the application of various financial instruments in investment management and introduces the basic techniques of portfolio performance evaluation.

FINM3103 MONEY, BANKING AND FINANCIAL MARKETS

(3 units)

Pre-requisite(s): None
Course Description: This course aims to provide students the awareness of how the financial system and its economic effect on their lives. It intends to equip learners, through various teaching and learning activities and assessment methods, with skills and knowledge to understand financial instruments, financial markets and central bank as well as how they work in an economy.

FINM3113 FINANCIAL ENGINEERING WORKSHOP

(3 units)

Pre-requisite(s): None
Course Description: This course introduces how to use python programming language to do data collection, storage, analysis and

visualization. After studying this course, students will learn how to crawl data from the web, store data into database, perform statistical analysis, and visualize the result. Equipped with these skills, students can further analyse finance data, make predictions and do back testing. To take this course, students are required to have some basic background in computer programming.

FINM3123 INTRODUCTION TO ECONOMETRICS

(3 units)

Pre-requisite(s): MATH2033 MATHEMATICAL STATISTICS or STAT2003 ADVANCED STATISTICS or STAT3083 APPLIED STATISTICS

Course Description: This course aims to give students a basic understanding of econometrics and regression analysis. Numerous examples will be examined in order to achieve this goal. Emphasis will be placed on the classical linear regression model, least squares estimation, hypothesis testing, and model building, and application to practical economic problems on forecasting and analysis. In addition, this course will train students to use computer statistical software.

FINM3133 TIME SERIES FOR FINANCE AND MACROECONOMICS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and MATH1063 LINEAR ALGEBRA II

Course Description: Due to growing importance and relevance of applied time series econometrics in finance and other related fields, the course is designed to help the students to understand the concepts, methods, applications and usefulness of time series analysis to various problems relating to finance. Practical examples from the industry and economy are the hall mark of the course combined with laboratory experiments with the latest software applications. For practical purposes, the course is extremely useful for management professionals working in different sectors and in various positions of decisions making. Upon completing this course, students should be able to master traditional methods of Time Series analysis, intended mainly for working with time series data.

FINM3143 FINANCIAL MATHEMATICS

(3 units)

Pre-requisite(s): STAT2063 PROBABILITY THEORY or STAT2023 ADVANCED PROBABILITY or MATH2063 PROBABILITY AND STATISTICS

Course Description: This course aims to provide students with recent developments in Black-Scholes-Merton Model and its applications to finance, such as option pricing in Binomial Tree Method. In particular, the course addresses a large spectrum of problems and techniques. The objective is to enable student to understand how Black-Scholes-Merton Model provides a large set of theoretical and computational tools with applications in option pricing.

FINM4003 FINANCIAL MATHEMATICS II (FOR FM STUDENTS)

(3 units)

Pre-requisite(s): FINM3003 FINANCIAL MATHEMATICS I (FOR FM STUDENTS)

Course Description: This course aims to provide students with an understanding of basic results in martingale theory, familiarise them with the different martingales in different financial markets, so that they will know how to apply various martingales to price derivatives such as options.

FINM4004 FINAL YEAR PROJECT I (FM)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing

Course Description: The aim of the final-year project is to enable students to go through an independent learning experience, giving them a chance to develop skills, including the use of online and offline materials, the logical development of scientific arguments, thesis writing skills, presentation techniques and time management. Students need to demonstrate an integrated understanding of finance and mathematics through solving real-life problems.

FINM4005 FINAL YEAR PROJECT II (FM)

(3 units)

Pre-requisite(s): FINM4004 FINAL YEAR PROJECT I (FM)

Other Condition(s): Year 4 standing

Course Description: This is an advanced individual project on an interdisciplinary and applied topic related to the field of financial mathematics for utilizing theories, knowledge and skills acquired in the program. The course is to guide students in developing appropriate research methodology to solve or study a problem of financial mathematics with real-world significant. This course is open to Financial Mathematics students only.

FINM4013 DESIGN AND ANALYSIS OF FINANCIAL ALGORITHMS

(3 units)

Pre-requisite(s): COMP3283 DATA STRUCTURE

Course Description: The primary objective of this course is to introduce the topic of algorithms as a precise mathematical concept, and study how to design algorithms, establish their correctness, study their efficiency and memory needs. The course consists of a financial modelling component in addition to the design of various algorithms.

FINM4023 INVESTMENT BANKING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the business of investment banking, including IPO, mergers and acquisitions, asset liability management, and new financial services; and financial institutions from the perspectives of both the consumer and the financial institution manager, including commercial banking, and investment banking. The student will become familiar with the financial services offered to the public and also with the financial, operational, and organisational aspects of the institution.

FINM4033 FINANCIAL MODELLING

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course aims to help students learn the essential knowledge of using Excel spreadsheet functions and some software as decision-making tools for formulating suitable solutions

to solve real-world financial and economic problems in the financial industry, and gain hands-on experience and professional skills of using Excel worksheet functions, pivot table, charts and VBA macros (Visual Basic Applications) for the practical implementation of financial models. It covers standard financial models in the areas of corporate finance, financial statement simulation, portfolio problems, option, portfolio insurance, duration, and immunisation.

FINM4043 EXOTIC OPTIONS AND STRUCTURED PRODUCTS

(3 units)

Pre-requisite(s): FINM3093 INVESTMENTS

Course Description: This course aims to provide students with an introduction to the major structured products, their design, pricing and their uses and risks. The key features of each exotic option that can be used to develop such structured products will also be covered. The course will discuss the process of Financial Engineering in the construction of these financial instruments by using the building blocks of bonds, forwards, swaps and standard options and exotic options. Emphasis will be on the Equity-linked, FX-linked and Interest-rate linked structured products.

FINM4053 NUMERICAL AND SIMULATION TECHNIQUES IN FINANCE

(3 units)

Pre-requisite(s): MATH2043 ORDINARY DIFFERENTIAL EQUATIONS, and
MATH3173 APPLIED STOCHASTIC PROCESS, and
FINM3143 FINANCIAL MATHEMATICS, and
COMP1023 FOUNDATIONS OF C PROGRAMMING or COMP3153 C++ PROGRAMMING LANGUAGE

Course Description: 1. To introduce students to the basic knowledge about solving and implementing numerical problems of increasing complexity that arise in finance. 2. To familiarize students with code design that reflects the structure of numerical problems from finance. 3. To apply Monte Carlo simulation in option pricing.

FINM4063 STOCHASTIC CALCULUS FOR FINANCE

(3 units)

Pre-requisite(s): FINM3143 FINANCIAL MATHEMATICS or
FINM3003 FINANCIAL MATHEMATICS I (FOR FM STUDENTS)

Course Description: 1. To introduce students to basic theory of discrete-time and continuous-time martingales including Brownian motion. 2. To familiarise students with Ito integral, Ito's formula and its applications, stochastic differential equations, and diffusion processes. 3. To apply stochastic calculus in option pricing.

FINM4073 ADVANCED FINANCIAL MATHEMATICS

(3 units)

Pre-requisite(s): FINM3143 FINANCIAL MATHEMATICS, and
MATH3173 APPLIED STOCHASTIC PROCESS

Course Description: This course aims to provide students with an understanding of continuous stochastic processes, how the option price changes with changes in different parameters, so that they will know how to apply delta-gamma hedging in risk management. Furthermore, it also provides some basic techniques of pricing Exotic Options.

FOOD1033 INTRODUCTION TO FOOD SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with an overview of the scientific principles and current status of technology related to food and food products. The contents will include an overview of food components, food additives, diet, food safety and health.

FOOD2013 FOOD CHEMISTRY

(3 units)

Pre-requisite(s): CHEM2003 GENERAL CHEMISTRY

Course Description: This course is designed to provide students with basic understanding of the chemistry of major and minor components in food systems, so that students can describe the relationship of these components to food stability in terms of degradative reactions and processing.

FOOD3003 FOOD ANALYSIS

(3 units)

Pre-requisite(s): CHEM2003 GENERAL CHEMISTRY

Course Description: This course intends to introduce students to the key concepts in professional food analysis in an industrial context, so that students can discuss the choice of analytical methods specific to a product and be able to interpret and analyse results. This course provides students with the concept and scope of food analysis, the basic principles and applications of major analytical techniques, and the steps involved in the analysis of food components.

FOOD3013 NUTRITION

(3 units)

Pre-requisite(s): None

Course Description: The way in which nutrients are taken and metabolised is essential for a balanced or healthy diet and the maintenance of optimal fitness. In this course, scientific knowledge and interpretation on nutrition and metabolism are expounded on to enable students to understand and evaluate advances in nutrition and health sciences. This course provides students in some detail, the structure and function of nutrients, the outline of the relationship between food intake and energy expenditure, understanding of the factors that influence people's choice of foods, the various metabolic pathways in nutrient metabolism and how they are regulated and integrated, the scientific evidences of proper nutrition to better health and extended longevity.

FOOD3023 FOOD TOXICOLOGY

(3 units)

Pre-requisite(s): BIOL2063 BIOCHEMISTRY

Course Description: Toxic dietary components, microbial toxins and food pathogens are the predominant causes of morbidity and mortality associated with foods. In this course the hazardous substances associated with food in general will be outlined and their effects on food reviewed. The beneficial use of micro-organisms will also be considered. This course provides students with some

basic coverage of the principles of toxicology relevant to food science and nutrition, information on microbial use and hazards associated with food, awareness of food contaminants, such as pesticides, antibiotic residues etc.

FOOD3033 CHEMICAL AND FOOD ANALYSIS LABORATORY

(3 units)

Pre-requisite(s): None

Course Description: The practical sessions consist of experiments and techniques commonly used in chemical and food analysis. Students will be given hands-on experience in chemical analysis and food analysis. Various types of instruments and equipment used in chemical and food analysis will be demonstrated. This course provides students with the basic principles and techniques for sampling and sample treatment; training in analytical techniques, including physical, chemical and biological techniques, for food investigations; hands-on experience in management techniques for conducting and evaluating a project on food analysis; practical experience in treatment methods for removal of environmental contaminants related to the production and processing of food.

FOOD3043 LIFE CYCLE NUTRITION

(3 units)

Pre-requisite(s): BIOL2003 GENERAL BIOLOGY

Course Description: This course provides students with the outline of the major physiological changes, nutritional needs and nutrition-related issues throughout the life cycle. It enables the students to apply basic principles of nutrition to nutrition-related problems that would occur in different stages of life cycle, and help them to describe possible interventions in different nutrition related problems throughout the life cycle.

FOOD3053 FOOD MATERIALS SCIENCE

(3 units)

Pre-requisite(s): FOOD1033 INTRODUCTION TO FOOD SCIENCE

Course Description: This course intends to familiarise students with the basics about food materials and also to introduce students to the basic principles of food processing and preservation so that students can comprehend the scope and complexity of food materials and be able to communicate effectively with specialists in food manufacturing industry. This course provides students with the fundamentals of food materials, techniques in food material handling, structuring operation, the compositional standards of food products, and the basic principles relevant to polyphasic food systems.

FOOD3063 FOOD PROCESS ENGINEERING

(3 units)

Pre-requisite(s): None

Course Description: This course intends to provide students with a basic knowledge about food processing systems and their engineering principles relevant to the food industry, so that students can comprehend the scope and complexity of food engineering and food processing systems, and are able to work and communicate effectively with specialists in the area.

FOOD3073 FOOD SCIENCE LABORATORY

(3 units)

Pre-requisite(s): BIOL2013 GENERAL BIOLOGY AND CHEMISTRY LABORATORY

Course Description: This is a laboratory-based course. The purpose is to introduce students to some basic food science experiments, skills and practices, and allow them to have some hands-on experience in the basic techniques of experimental, analytical and practical procedures in food chemical analysis, nutrient analysis and the handling of food. This course provides students with some practical and basic experiences in food chemistry and analysis of food and nutrients, some hands-on experience in the making of food and food analytical techniques, introduction of some commonly used food chemical analytical instruments, procedures and practices.

FOOD3083 RESEARCH METHODS IN FOOD SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course introduces qualitative and quantitative research methods that provide students with a basic knowledge of reading and evaluating research and professional literature within food science area. The course gives students an introduction to research design, methods for data collection, assessment of data quality, and how research results can be presented and interpreted.

FOOD3093 COMMUNITY NUTRITION

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to let students identify relationships between lifestyles related to food consumption patterns and implementation of successful health promotion of the population in the community for improvement of the quality of life and extension of life expectancy. The objectives are: 1. to understand community nutrition and recognize the importance of community nutrition; 2. to conduct nutritional assessment and monitoring of the community; 3. to identify factors affecting food choices, nutritional status, and food system; and 4. to integrate knowledge on the nutrition policy, guidelines and controversies.

FOOD4003 FOOD SAFETY AND QUALITY MANAGEMENT SYSTEM

(3 units)

Pre-requisite(s): FOOD3023 FOOD TOXICOLOGY

Course Description: This course covers topics related to food safety, food standards, food plant and food retail sanitation, food and health related advertisement, regulations and laws etc. Emphasis will be placed on explaining and outlining the legal rules involved in the production, manufacturing, processing and trading of food products, consumer protection regulations and the proper labelling of food products. This course provides students with the knowledge to collate objective and scientific data to provide law-makers to draft regulations, legislation and laws dealing with consumer protection, composition of food, prevention of harmful effects of food and controlling food safety; the basic legal requirements and the methods of food safety control that are of importance and use to food producers, manufacturers, retailers and government and to develop international trade harmony and standards.

FOOD4004 FINAL YEAR PROJECT I (FOOD)

(3 units)

Pre-requisite(s): None

Course Description: A semester individual project on a topic related to the field of food science utilizing skills and knowledge acquired in this programme. Each student has to perform a literature review or a research project and write a dissertation of about 5,000 words. This course enables students to go through an independent learning experience; and gives students a chance to develop skills, including the use of on-line and off-line materials, the logical development of scientific arguments, thesis writing skills, presentation techniques and time management.

FOOD4005 FINAL YEAR PROJECT II (FOOD)

(3 units)

Pre-requisite(s): Not less than Grade B of FOOD4004 FINAL YEAR PROJECT I (FOOD)

Course Description: This course allows students to carry out more in-depth research for their Final Year Project. Students interested to enrol in this course need to achieve grade B or above in FOOD4004 and obtain permission from the Program Director. They should register the Final Year Project II as a major elective during the online course selection.

FOOD4013 MEAT AND DAIRY SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course outlines the science and technology of meat (beef) and dairy products. The importance of meat's contribution to a healthy, contemporary diet is emphasised. Various other meat products (e.g. from pig, lamb and chicken) and their related processing techniques are also discussed.

FOOD4023 FUNCTIONAL FOODS

(3 units)

Pre-requisite(s): None

Course Description: This course explores nutritional enhancement with respect to foods or dietary components that provide health benefits beyond basic nutrition or deliver specific physiological benefits to health and/or reduce the risk of diseases. Categories and examples of functional foods, the scientific basis to support claims for functional components and the link between functional foods with balanced diet and diseases will be explored. Continuous consumer demands and the response of the food industry will be analysed and discussed. This course provides students with the concept, scope and chemistry of functional foods; the highlight of functional foods in the food industry; and the impact on the development of new functional food products.

FOOD4033 GRAIN AND CEREAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course outlines the basic properties of cereals and other grains used as food or other products. The importance of cereal grains in the food industry. The importance of cereal in human health and nutrition will also be stressed.

FOOD4043 FOOD BIOTECHNOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course reviews traditional and current biotechnological applications and developments. Topics include traditional food biotechnology (such as western and oriental fermentation technology) and modern biotechnology (such as genetically engineered foods).

FOOD4053 FOOD WASTE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on an in-depth analysis of waste created by the food industry and consumers. The importance for reducing the production of food waste to conserve natural resources and the need to use modern technology and environmental means to control food-derived pollution will be emphasised. This course allows students to understand the problems associated with food waste and pollution; and informs students the modern methods to reduce food waste and how to counter food waste pollution.

FOOD4073 FRUIT AND VEGETABLE SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course outlines the science of fruits and vegetables and their products. The importance of fruits and vegetables to a healthy, contemporary diet is emphasised. The production, post-harvest physiology and quality deterioration of fruits and vegetables will also be discussed.

FOOD4083 INTRODUCTION TO HUMAN PATHOPHYSIOLOGY AND PHARMACOLOGY

(3 units)

Pre-requisite(s): BIOL2063 BIOCHEMISTRY, and BIOL2073 PHYSIOLOGY

Course Description: This course is to present a compendium of human diseases relevant to the nutrition and health professional. Students will learn physiological and biochemical mechanisms of disease development, including the incidence and prevalence of diseases. The fundamental principles of pharmacology will be introduced and drugs used to treat diseases that affect various organs of the body will be examined.

FOOD4093 NUTRITION AND DISEASE PREVENTION

(3 units)

Pre-requisite(s): FOOD3013 NUTRITION

Course Description: This course helps students to appreciate and understand the close relationship between nutrition and chronic disease prevention. Students will gain the knowledge of the factors that contribute to the onset and progression of several chronic diseases, and the reasons of prescribing the various diets and nutritional regimen for preventing and improving these chronic diseases.

FOOD4103 NUTRITION IN MEDICAL THERAPY

(3 units)

Pre-requisite(s): FOOD3013 NUTRITION

Course Description: This course is to help students to understand and utilise the knowledge of nutritional care as adjunct therapy to

medical, surgical and pharmacological therapy; to understand the common laboratory tests, interpretation of test data and collection of pertinent data for assessing nutritional needs of patients; to integrate medical biochemical, dietary and lifestyle information to provide dietary advices for various medical and health conditions.

FOOD4113 FOOD MICROBIOLOGY AND FOOD SAFETY LABORATORY

(3 units)

Pre-requisite(s): BIOL2013 GENERAL BIOLOGY AND CHEMISTRY LABORATORY, and FOOD3073 FOOD SCIENCE LABORATORY

Course Description: In addition to the trainings in BIOL2013 General Biology and Chemistry Laboratory and FOOD3073 Food Science Laboratory, this course provides on-hand experience in traditional and modern biotechnological methods used in food science, especially for food safety purpose. Students will learn to perform experimental techniques for manipulating microorganisms. Methods used to detect toxicants in modify food and food products will also be introduced.

FOOD4123 FOOD PACKAGING

(3 units)

Pre-requisite(s): None

Course Description: This course covers the important aspects of packaging technology and packaging materials. Packaging materials and their effects and interactions with the packed foods and the environment will be discussed. The important methods for the packaging of fresh and processed foods will be emphasised. The food safety standards related to food packaging will also be introduced.

FOOD4133 WINE AND CHEESE SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: Wine and cheese are both made through fermentation; and are important in western food culture. Sensory evaluation plays a key role in food quality assessment. The course intends to focus on the principles and techniques of wine and cheese production, the design and practices of food sensory experiments. In addition, this course provides students with multiple opportunities of sensory evaluation practices on a range of wine and cheese products.

FOOD4143 NUTRITION IN PRACTICE

(3 units)

Pre-requisite(s): FOOD3013 NUTRITION

Course Description: This course provides students with advanced concepts in nutrition and contemporary health issues, and let students be more knowledgeable about the application of nutrition into practice effectively, such as at individual levels, school, elderly cared homes. Key recommendations for the development of menu planning and menu assessment are covered.

FOOD4153 FOOD PRODUCT DEVELOPMENT AND PRACTICE

(3 units)

Pre-requisite(s): FOOD2013 FOOD CHEMISTRY

Course Description: This course introduces product development and its practice. It introduces students factors that affect the quality and consumer acceptance of food products, and how these factors are determined through techniques like shelf life tests, sensory evaluations and market research. It also provides students with an opportunity of food production practice.

FOOD4163 ADVANCED FOOD ENGINEERING

(3 units)

Pre-requisite(s): FOOD3063 FOOD PROCESS ENGINEERING

Course Description: This course explores advanced food processing operations, integrating both conventional and modern techniques. Topics include thermal processing, microwave heating, evaporation, freezing, mixing, psychrometrics, mass transfer, membrane separation, and dehydration. Emphasis is placed on engineering principles, mathematical modelling, and industrial applications.

FOOD4173 FLAVOR AND SENSORY SCIENCES

(3 units)

Pre-requisite(s): None

Course Description: Modern flavors and fragrances are complex formulated products, containing blends of aroma compounds with auxiliary materials, enabling desirable flavors or fragrances to be added to a massive range of products. Flavor profiles of food products alter consumers' preferences. This course will provide the students with an understanding of the chemical stimuli involved in flavor perception, analytical approaches to characterize flavor stimuli, mechanisms of flavor formation, flavor-ingredient interactions, mechanisms of flavor release and industrial methods of flavor production.

FOOD4183 FOOD COLLOIDS AND COMPONENT SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course delves into the intricate science of food colloids and component interactions, providing students with a nuanced understanding of the physical and chemical properties that dictate food behavior and quality. Through practical examples and case studies, students will explore how various colloidal systems influence texture, stability, and sensory attributes of food products. The curriculum is designed to bridge the gap between theoretical knowledge and real-world applications, enabling students to apply scientific principles to optimize food formulations and processing techniques.

FOOD4193 NUTRITIONAL BIOCHEMISTRY

(3 units)

Pre-requisite(s): BIOL2063 BIOCHEMISTRY

Course Description: 1. Outline the composition and energy needs of human body. 2. Describe the energy content of food and the overall metabolism in human body. 3. Describe the nutrition and metabolism of nutrients in human body. 4. Provide students with basic coverage of the biochemistry relevant to food science and nutrition.

FREN1013 FRENCH I

(3 units)

Pre-requisite(s): None

Course Description: This course is intended for complete

beginners in French according to the CEFRL (Common European Framework of Reference for languages) Level A1 (Part 1). It aims at developing basic knowledge in the four areas of competence (listening, speaking, reading and writing) and developing students linguistic, communicative and cultural competence in the target language.

FREN2023 FRENCH CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce what French Culture is. Its general objective is to use, complement and transform pre-existing knowledge and interest in France students may have into intellectually, socially and professionally relevant skills.

GCAP3003 SERVICE LEARNING AND COMMUNITY ENGAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The objective of this GE Level 3 capstone course is to provide Year 3 and Year 4 students with an opportunity for service-learning, thereby building their sense of social responsibility and community engagement as well as their consciousness of values. The hands-on experience in service-learning and community projects will allow students to apply the knowledge that they have obtained throughout their studies at UIC for the benefits of the service users under the guidance of their teachers and the community partners. The service-learning experiences will strengthen students' communication, interpersonal, problem-solving, decision-making skills, while encouraging them to use their creativity to identify resources and solutions that could help address the community's issues. .Mutual benefits can be derived through meaningful service provided to the community and valuable learning experiences gained by the students. Community partners can be: non-for-profit agencies/organizations/institutions; social enterprises that have the dual goals of maximizing profits and benefits to the society; and the non-profit-making initiatives/divisions of business enterprises.

GCAP3023 SERVICE LEARNING THROUGH SECOND LANGUAGE TEACHING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop students' knowledge and skills that are necessary for constructing and delivering effective language lessons to specific groups of learners. It also provides students with opportunities to work in a team to adjust their teaching plans according to the learning needs and learners' abilities, as well as the teaching facilities available in the learning settings.

GCAP3043 MAN AND NATURE IN WHOLE PERSON PERSPECTIVE

(3 units)

Pre-requisite(s): None

Course Description: This course provides theoretical perspectives, methods and tools for environmental education. The interdisciplinary studies in relationship of man and nature is introduced through literature and lectures, is applied in a real-world case "Sustainability at UIC and Zhuhai" and designing an environmental education plan, and is developed through discussion and reflection.

GCAP3053 PHILANTHROPY DEVELOPMENT AND SOCIAL SERVICE

(3 units)

Pre-requisite(s): None

Course Description: This course will systematically introduce the history, current situation and trend of philanthropy and social service development in Mainland China. The students will have a preliminary understanding of the current situation of China's NGOs through multiple methods. After learning theories related to community development (e.g. Rothman, 1968, 2001), discussing the needs of different communities, and learning from NGO staff and service users, students get to know the work content of NGOs. After 6 weeks of in-classroom learning, that emphasizes on critical thinking and adopts multiple perspectives, students will be enabled to form their own views about philanthropy development in mainland China.

GCAP3063 COMMUNICATION AND SOCIAL ENGAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students the core concepts, practice, and services of communication and social engagement. It is designed to give students an understanding of the purpose and value of communication in social engagement; identifying communication needs and applicable communication channels for solving social problems; coordinating the provision of appropriate and relevant information to affected communities, and utilizing a variety of communication resources for developing program and improve services for community engagement. The intersections communication and social engagement in the context of new communication technologies would be analyzed. Students would be encouraged to integrated communication skills and technologies with social engagement strategies innovatively to address social issues and provide relevant social services.

GCAP3073 COMMUNITY FESTIVALS: CULTURAL EVENTS AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: (a) provide students with theories and application of how to organize both Chinese and international festivals as special events, which are in the context of cultural, social, political, economic, environmental as well as artistic aspects; (b) analyze and apply the basic event management and arts theories in enhancing the visual attractiveness during event planning and operations; (c) research, develop their critical skills by working through a range of projects, and students will strengthen their ideation and research capabilities as a creative and innovative process using text, visual elements and aesthetics. Furthermore, through the study of successful cases around the world, they will build up a foundation in event planning and arts management creating different styles or themes of both Chinese and international festivals in school communities; (d) reflect and evaluate how to integrate academic content with community-engaged experiences to advocate for social awareness of cultural diversities.

GCAP3083 DIGITAL MEDIA AND MARKETING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the characteristics, sources, practice, services and audiences of digital media locally and internationally; integrates marketing planning and strategies; and compares the effects of the cases of digital marketing. The course analyses the marketing strategies and effectiveness of uses of digital media. It is designed to give students an understanding of the contextual factors, social networks, audience needs and those affect the marketing and promotional contents of digital media. The intersections of online services and media marketing, including audio, video, commercial short film, and social media will be analyzed. The writing and producing the contents for digital marketing will also be covered. Additionally, students would be guided to apply digital media and marketing strategies to provide services for the local, regional and global communities.

GCAP3093 THE ATTENTION ECONOMY: A NEW EXPERIENCE OF CULTURAL CAPITAL

(3 units)

Pre-requisite(s): None

Course Description: This course aims to acquaint students with the interdisciplinary knowledge of the Economy of Attention. It also provides students with the increasing significance of attention in a knowledge society characterized by the explosion of information and data driven business activities. Students will learn how to apply fundamental four core elements (attention in human desire, attention and business, attention-capital, attention as resources) of Franck's theory of the economy of attention. Furthermore, students will have chances to develop their teamwork and individual knowledge and skills through simulated contextual experience. Upon completion of the course, students will apply "Attention as Economic Resource" in three types of media literacy (Printed media, Virtual or Physical Products, and Digital Media) to demonstrate their understanding of the Attention Economy as a new form of experience for the future cultural and service industries.

GCAP3103 VISUAL ANTHROPOLOGY: DOCUMENTARIES AND ETHNOGRAPHIC FILMS

(3 units)

Pre-requisite(s): None

Course Description: This interdisciplinary course provides students various programmes with a thorough grounding in the fundamentals of anthropological film theory and practice, and it focuses in depth on the historically and socially engaged aspects of anthropological filmmaking. The course will build on students' knowledge of Visual Anthropology: Documentaries and Ethnographic Films, and it will require students' full analytical and creative engagement. Students are expected to develop professional authorship skills and to learn how to articulate effectively the choice of technical equipments, selection of topics, and methodological frameworks. A collaborative approach is encouraged at all levels—students will work collective in groups of two to three on the conception, exception, fieldwork and dissemination of their approved projects. While non-CTV students are not expected to have advanced filmmaking skills, basic familiarity with the use of recording devices such as cameras, video camcorders and cell phones will be an asset. In short, through this course, students will learn to tell stories in various film forms; to draw on the key factors of anthropological and social science approaches to filmmaking; to think creatively about the relationship between form and content in the production of documentaries and ethnographic films; to master the technical skills needed to produce anthropological filmmaking of different forms for varies audiences; and to view and review relevant films and materials.

GCAP3113 COMPREHENSIVE PRACTICAL TRAINING ON BIG DATA AND AI

(3 units)

Pre-requisite(s): None

Course Description: This course will establish a co-supervision mechanism with supervisors invited by the instructor. Two co-supervisors will work closely to guide students throughout the project to achieve set project goal(s). Students will have the opportunity to conduct the project in an interdisciplinary approach in a team setting. Under exceptional circumstance, a student with approval of the instructor can individually conduct a project. Examples of contemporary industrial/community issues of the interdisciplinary nature includes, but not limited to the following: (1) Responsive Big Data Analytics (BDA) and AI;(2) Explainable BDA and AI;(3) Privacy issues in BDA and AI;(4) Humanitarian BDA and AI;(5) Green development and sustainability with BDA and AI;(6) Environmentally friendly Awareness with BDA and AI;(7) Human in the loop in BDA and AI;(8) The roles of BDA and AI in industry settings;(9) The roles of BDA and AI in community settings.

GCAP3123 COMPUTER TECHNOLOGY AND AI PROJECT

(3 units)

Pre-requisite(s): None

Course Description: This course allows students from different disciplines to study without any specific pre-requisites. According to different topic interest, the course supervisor(s) will provide references and study materials to supervise and guide the students during the study. The projects involve study, exploration and integration of various CS, DS and/or AI technologies to inter-discipline real world applications. It aims to allow students to study, learn and applied various state-of-art CS, DS and/or AI technology into inter-disciplinary real world problems, and more importantly is to learn how to conduct the project as a team with members of various areas of expertise to tackle complex real world issues, and deepen their analytical and creative skills in the course of study and research.

GCAP3133 DIGITAL IMAGES IN DAILY LIFE

(3 units)

Pre-requisite(s): None

Course Description: With perception with real world, images or videos are watched or used in our daily life. It is beneficial to understand and appreciate daily photos/pictures and videos on TV, internet and all multimedia. This course introduces concepts of digital images and basic processing techniques to make digital images more beautiful. Also, the course introduces simple instructional programming language MATLAB as needed to process digital images. The various challenges and opportunities will be provided to process digital images in daily life such as image resizing, enhancement, digitalization of paintings etc. The course

focuses on the basics of understanding of digital images and their processing techniques for both Computer Science (CS) and non-CS students to understand and appreciate digital images and their usages in our daily life.

GCAP3143 ECOLOGICAL CIVILIZATION IN GREATER BAY COMMUNITY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop students' experience in delivering high quality project to a real community in systemically and professional manners. Students will work in groups and identify as well as resolve a real problem in relation to ecological civilization and environmental sustainability in the community. Through the completion of this project, students are expected to demonstrate the appropriate applications of interdisciplinary knowledge and skills gained from various courses offered by different academic units so as to help the community to live in a better environment. The project type could be (but not limited to) project-based, community-based, or service-based. The project should have the elements of the following (but not limited to): sustainability and/or environment management, education, arts and creativity, science and technology, and/or the integration of various sustainability and environmental aspects.

GCAP3153 PROMOTING SOCIAL INCLUSION THROUGH INTERGENERATIONAL PROGRAMMING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to explore and critically review variable intergenerational pathways, models, and cases for connecting people of different generations as well as combating age discrimination. To this end, the course gives emphasis to the need of embracing an interdisciplinary approach for careful planning, decision-making, problem-solving, and creating intergenerational programs. This will also be the major theme when delivering contents about intergenerational practice. Through projects of collaboration, students will be given opportunities to tap into creativity, innovation, technologies, and research for applying knowledge while promoting social inclusion.

GCAP3163 SCREENING GENDER

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the analysis of gender and film. Students will critically investigate the representation of gender across a broad range of screen culture, studying films from a diverse range of genres, national cinemas, and historical epochs. Students will explore how the representation of gender intersects with race and ethnicity, sexuality, national identity, and social class. They will study theories of stardom, performativity, and embodiment, and investigate how film culture both reinforces—and subverts—dominant gender stereotypes. Through class discussion, group exercises, and written assignments, students will apply their theoretical knowledge to the analysis of film—and visual culture more broadly. Course screenings will include classical Hollywood, film noir, the documentary, horror and science fiction, action films, the melodrama, transnational cinema, independent film and video art, and contemporary television. Course readings will draw from key texts on film theory, gender and women's studies, queer theory, audience and reception theory, and cultural studies

GCAP3173 SONGWRITING WITH ALGORITHMS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop the students' creative skills necessary to analyse and compose innovative songs using algorithms and mathematical procedures like randomness, combinatory, or matrixes. As an independent study course, students will learn through provided readings, videos, podcasts and discussions with instructor on how to create lyrics, rhythmic structures, and melodic patterns using their own algorithms and musical procedures. The skills will be learned firstly through the analysis of the techniques used in the selected songs and models provided and then by application of these compositional techniques and procedures. This course also aims to develop the students' analytical and critical thinking skills as well as the ability to evaluate and judge complex procedures related to melodic and rhythmic cohesion, music structure and harmonic originality. As such, the course is designed for students who want to expand their musical knowledge under a multidisciplinary approach and be able to compose out of the box. After an introduction to several Models of algorithms applied to music composition students will learn how to compose lyrics and specifics aspects of songwriting. The course concludes with students writing a final project.

GCAP3183 INTERDISCIPLINARY MODELING PROJECTS

(3 units)

Pre-requisite(s): None

Course Description: This course will particularly focus on exploration of statistics or mathematical-related structure and models in various fields including but not limited to applied science, natural science, engineering, art, music, social science, humanities, philosophy and decision-making. It aims to reveal some of the hidden abstract relationships that animate human experiences and activities, and reflect on students' own learning to gain insight into their own strategic decisions.

GCAP3193 INVESTMENT PRACTICE

(3 units)

Pre-requisite(s): None

Course Description: This course will provide students with the opportunity to conduct an independent interdisciplinary study under the supervision of a faculty member of the financial mathematics. Student will choose an issue broadly related to investment practice or concern that is of interest to her/him, conduct systematic study, design innovative solution to do rational investment, promote trading thoughts in various channels. The study aims to allow students to think beyond their major field, make connections to other disciplines like financial mathematics, econometrics, accounting, statistics, computer science, data science, cinema and television , etc, and solve real-world issues in financial industry, and deepen their analytic and creative skills. All these are competences that students will need in the complexity of the contemporary world and workplace as responsible and responsive global citizens.

GCAP3203 SELECTED TOPICS IN FOOD AND NUTRITIONAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course is an interdisciplinary capstone project in which students utilize the knowledge and skills gained through their majors to create a culminating work that critically addresses a problem or issue in the field of food and nutritional science. The course provides students with the opportunity to integrate and apply learning from their professional programs of study in a comprehensive manner. Emphasizing systems thinking and community engagement, the capstone experience explores solutions to real-world food or nutrition issues through focused study and team-based learning, with direction from a faculty member and in partnership with a community leader.

GCAP3213 SERVICE LEADERSHIP: PROMOTING A BETTER WORLD

(3 units)

Pre-requisite(s): None

Course Description: Service leadership focuses on collaboration and communication between service leaders and others. It includes satisfying the needs of oneself, other people, community, and the society. This course aims to develop the necessary knowledge and competencies that will enable students to become effective service leaders to meet the needs of the changing society. In this course, students will have the opportunity to apply what they have learned to develop a community service plan or a business plan for establishing a new social enterprise. The main objective of this course is to help students to establish and then foster their awareness of the well-being of others so that they will exhibit service leadership behaviours in their daily lives and in the development of their future careers.

GCAP3263 SPECIAL TOPICS IN COMMUNICATION AND CHINESE CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone will provide students with the opportunity to conduct an independent interdisciplinary study under the supervision of a faculty member of the Department of Communication's Chinese Culture and Global Communication (CCGC) program. Students will choose a community issue or concern related to Chinese culture that is of interest to them, conduct systematic study, apply knowledge and skills that they have gained from the major study and other disciplines, and provide an innovative solution to address the issue. The study aims to allow students to think beyond their field of expertise, make connections between their learning and real-world issues, and deepen their analytic and creative skills. All these are competences that students will need in the complexity of the contemporary world and workplace as responsible and responsive global citizens.

GCAP3273 CHINESE CULTURE AND YOUTH EDUCATION

(3 units)

Pre-requisite(s): None

Course Description: This course is intended to train university students to develop innovative and creative ways to educate young people at middle-school age about Chinese culture, including but not limited to Chinese linguistics, literature, and history. The course will start with theory and guidance from a juvenile pedagogic perspective, providing practical and effective techniques for education. Students will develop and provide activities and services on Chinese culture education in collaboration with local middle schools. Students are expected to actively participate in educating and fostering the younger generation to be rational inheritors and communicators of Chinese culture. This educational project will serve as a reflective and communicative medium for students and collaborators to explore pedagogical practices and design innovative ways to enhance their knowledge and skills about Chinese culture communication.

GCAP3283 PUBLIC LANGUAGE SERVICES IN THE GREATER BAY AREA

(3 units)

Pre-requisite(s): None

Course Description: Public language services encompass government or public institution-provided language assistance to facilitate communication and access to information for linguistically diverse populations in public settings. This interdisciplinary GE Capstone experiential-learning course explores the crucial roles of public language services in promoting equitable access to information and resources within the culturally diverse communities of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). Through a blend of classroom learning, practical exercises, fieldwork immersion, community engagement, guided projects, creative production, and reflective reports, students will gain hands-on experience and apply their knowledge and skills in real-life settings. Students will synthesize their interdisciplinary knowledge to develop innovative solutions, value teamwork for the common good, and apply classroom learning to address significant issues in language services for the public. By conducting group fieldwork or collaborating with local stakeholders, students will develop essential skills and knowledge to actively contribute to language services in the public sphere, fostering positive social change.

GCAP3293 INDEPENDENT STUDY IN COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone will provide students with the opportunity to conduct an independent interdisciplinary study under the supervision of a faculty member of the Department of Communication's Media and Communication Studies program. Students will choose a community issue or concern related to Communication that is of interest to them, conduct systematic study, apply knowledge and skills that they have gained from the major study and other disciplines, and provide an innovative solution to address the issue. The study aims to allow students to think beyond their field of expertise, make connections between their learning and real-world issues, and deepen their analytic and creative skills. All these are competencies that students will need in the complexity of the contemporary world and workplace as responsible and responsive global citizens.

GCAP3303 SPECIAL TOPICS IN INTERACTIVE NARRATIVES

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone Interdisciplinary course is designed to immerse students in the diverse realm of interactive narratives, leveraging the interdisciplinary framework of the Department of Communication. It offers students the unique opportunity to undertake a comprehensive study under faculty supervision, focusing on the intersection of narrative theory, digital media, and interactive storytelling. Students will choose a topic in interactive narratives, research systematically, apply diverse knowledge and skills, and propose innovative narrative strategies. The aim is to cultivate the necessary skills to comprehend and actively participate in complex narratives in the global context.

GCAP3313 URBAN CREATIVE CULTURAL CLUSTERS

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone will provide students with the opportunity to conduct an interdisciplinary group study under the supervision of a faculty member of the Department of Communication. Students will engage with the cultural communities in Zhuhai and the Greater Bay Area and explore the ways they can become the prime cultural spaces in Zhuhai. This will be a systematic study, applying knowledge and skills that they have gained from the major study and other GE courses. While it concerns in a first instance the gathering of information on such clusters, interviewing key informants and analyzing these interactions, the case study will then proceed to add recommendations of how such a success story can be translated to other cultural sites and provide an innovative solution to address the issue of creative cultural clusters. The study aims to allow students to think beyond their field of expertise, make connections between their learning and real-world issues, and deepen their analytic and creative skills. All these are competences that students will need in the complexity of the contemporary world and workplace as responsible and responsive global citizens.

GCAP3323 DEVELOPING READING COMMUNITIES

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone provides students with the opportunity to conduct an independent interdisciplinary study under the supervision of a faculty member of the Department of Languages and Culture's ELLS program. Students work in groups to establish, develop and run an English-language reading group, in-person or online, using the knowledge and skills they have gained as students of literature and language. They use their leadership, teamwork and communication skills in the service of a community to promote an active culture of reading by developing and implementing a reading group. Students choose a book that engages them, develop a plan to use that book as the focus of a reading group project, and run a 6-8-week reading group, in person and/or online (eg on social media platform such as BookTok). They evaluate the project in final report.

GCAP3333 EXPLORING LOCAL PERSPECTIVES ON GLOBALISATION AND DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone Interdisciplinary Independent Study course will guide students to apply selected social-scientific research methods to independently explore globalization- and sustainability-related local practices, behavior, and attitudes. The course will foster research skills through an exposure to practical research experience. It will stimulate interdisciplinary synthesis of knowledge as students will combine knowledge and skills acquired in various courses and programmes. The Zhuhai/Greater Bay Area-located group project integrated in the course will lead students to develop leadership, interpersonal communication, local sensitivity, and resource- and time-management skills necessary for successful research team work. Finally, this course aims at making participants discern the contribution of social-scientific research to the effort by public as well as commercial actors, navigating sustainable development challenges in a globalized world, and thus motivating students to make more reasoned study and career decisions.

GCAP3343 EMERGING ISSUES IN DIGITAL SOCIOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This GE Capstone course invites students to undertake an independent study project on given themes. The course aims to engage students with emerging issues in digital sociology and provide in-depth methodological training to help them pursue independent projects. Students will be divided into groups and choose a topic of interest from a pool of issues addressing emerging social problems in the Greater Bay Area, and their potential solutions. They will then develop an independent project under the supervision of the course instructor. The chosen topic needs to have an applied value so that students can use this for their academic development and professional growth, i.e. make seminar presentations, write academic papers, etc. Students will present their project towards the end of the semester and submit a final project report. The project fieldwork is related to industrial society, and, depending on the topic, data collection may be pursued on or off campus within the Greater Bay Area depending on the topic.

GD1003 FOUNDATIONS OF PROGRAMMING FOR GAME DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the fundamental concepts and techniques of programming for game development. Students will learn to design, implement, and debug computer games using industry-standard tools and languages. The course covers basic coding practice, object-oriented programming, game engines, computer graphics, basic game physics, basic artificial intelligence, and frequently used design patterns.

GD2003 NARRATIVE DESIGN FOR GAMES

(3 units)

Pre-requisite(s): None

Course Description: This course aims at equipping students with fundamental concepts of creativity narrative design for games. In particular, attention is paid to the goals and practices of writing for

effective narrative scripts, including character development, story, tension, rules and play in the proper script format. The course content will focus on dramatic models and paradigms for linear storytelling, the importance of fictional and narrative elements in cross-media content, the interplay of characters, narrative conflicts and scenarios. Assignments will facilitate students devising their narrative stories and applying the theoretical concepts to practice.

GD2013 DATA STRUCTURE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a solid foundation in data structures and their applications in game development. Students will learn to understand and implement fundamental data structures such as arrays, linked lists, stacks, queues, trees, and graphs. The course emphasizes the ability to analyze algorithm efficiency through time and space complexity. Students will apply suitable data structures to solve practical programming problems. Programming assignments and projects will reinforce the application of concepts in game design scenarios.

GD2023 2D PLATFORM GAME

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to game programming and design, focusing on game engine fundamentals, programming techniques, game theory, and the creation of 2D interactive experiences. Students will learn the professional process of mobile game development and apply an iterative approach to develop their own 2D game. They will combine creativity and technical skills to bring their game ideas to life, with an emphasis on effective technology use. By the end of the semester, students will have a solid understanding of game programming basics, formal systems in 2D games, and the importance of playtesting. In addition, they will work collaboratively in teams to design and create their own games, which they will present to the class.

GD2033 3D Modelling and Animation

(3 units)

Pre-requisite(s): AIM2043 FUNDAMENTALS OF DIGITAL DESIGN

Course Description: This course provides an in-depth introduction to the techniques and principles of 3D modelling and animation, specifically tailored for game design. Students will learn to create and animate 3D models, apply textures and shaders, and integrate their work into a game engine. The course emphasises technical skills and artistic creativity, focusing on the unique demands and opportunities of the games industry.

GD2043 GAME DESIGN AND PROTOTYPING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the complete process of game design, prototyping, and production. Students will learn how to conceptualize, design, prototype, and iterate on their game ideas, focusing on both creative and technical aspects. The course provides hands-on experience with industry-standard tools for game development, including game engines, prototyping software, and collaborative tools. Students will work in teams to create playable prototypes and explore the critical steps of turning a game concept into a fully developed product.

GD2053 GAME STUDIES

(3 units)

Pre-requisite(s): None

Course Description: Game studies is an analytical academic discipline focusing on the aesthetics of games, communication in computer games, elements of play in game design, the impact of games in culture and their role in the current media landscape. The content of this course aims to provide insight into the theoretical research of games to aid future game designers, artists and programmers in conceptualizing the most captivating, original and innovative game ideas. The course assignments, lectures, readings and discussions will cultivate students' ability to think critically about their game-design work and their impacts in both a globalized society and on individuals.

GD2063 HISTORY OF GAME DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the history of video games and design. It includes the history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. Students will be taken through a video game timeline, highlighting the important events that led to video games as they are today. The course will address key innovators and major turning points. Students will also be exposed to staple classics in each genre to build an appreciation for current games.

GD3003 SPECIAL TOPICS IN GAME DESIGN PROJECTS

(3 units)

Pre-requisite(s): None

Course Description: Students will develop the skills needed to interpret and articulate a personal vision within the field of Game Design. With the specific subject matter is set by the interests of the faculty, these activities serve as a means for students to engender a finalized work ready for a professional portfolio. The focus is on expanding practical knowledge in the areas of design, media production and programming. The range of topics may include world-building, advanced asset production, animation for games, experimental technologies, interaction design, serious games, educational applications, and simulation, among others.

GD3013 3D GAME DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides a comprehensive introduction to 3D game development using Unreal Engine, one of the most powerful and widely-used game engines in the industry. Throughout the course, students will gain hands-on experience with the tools and techniques necessary to create immersive and interactive 3D games. The curriculum covers a broad range of topics, including game design principles, programming with Blueprints and C++, asset creation, level design, and multiplayer functionality.

GD3023 GAME PROJECT PLANNING AND PRODUCTION MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: With a variety of practical assignments, this course offers to practise and apply the skills necessary to succeed in the world of video game publishing, either as the indie developer or with the game publisher. The course will also provide tools and resources to guide students to evaluating the decision to self-publish or not. Students will also practise planning a project, creating production documents, implementing a prototype, testing, providing and receiving feedback from the instructor and their peers.

GD3033 CHARACTER DESIGN

(3 units)

Pre-requisite(s): None

Course Description: Creating believable visuals of imaginary creatures and characters requires concept artists to effectively visualize elaborate conceptual ideas and translate them into stunningly detailed 2D compositions. This course offers students the methodology and practice of creating hybrid creatures, character designs and realistic and history-inspired designs respectful to cultural sensibilities. The course content will also include anatomical studies of animal species, analysis of Western and East Asian mythology and collective imaginations, human and animal interactions, and contemporary fiction.

GD3043 GAME PHYSICS

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction into the world of game physics. We will review all the essential math that provides the foundation for most physics engines, starting with a review of vectors, matrices, basic trigonometry, rigid-body collision, and fundamental calculus as well. The lectures are designed to teach all concepts from first principles. In our journey, we will touch upon several topics in game physics, like velocity, acceleration, integration, mass, forces, gravity, drag, friction, rigid body dynamics, collision detection, constraints, etc. The course combines theoretical concepts with hands-on implementation using physics engines (e.g., Box2D, Bullet, PhysX) and physics simulations in game engines like Unity or Unreal Engine.

GD3053 LEVEL DESIGN

(3 units)

Pre-requisite(s): None

Course Description: Building and designing creative, innovative and unique games requires effective design approaches to level design, a field of game design focused on creating game levels that work together to provide rewarding and interesting gameplay for the users. This course will equip students with theoretical concepts and practical applications on compelling level design components, covering topics such as level pacing and flow, player goals, aesthetics, and gameplay design, among others.

GD3063 GAME AI

(3 units)

Pre-requisite(s): None

Course Description: This course aims to engage students being able to perform the thinking tasks and interactions from interdisciplinary knowledge of the artificial intelligence for games. Student will be able to demonstrate their knowledge of algorithms and techniques to contextualise the AI used in a game such as movement, decision making, strategy and agent-based AI. Student will explore the algorithms and data structures step-by-step to generate a solution from AI. Upon completion of the course, students will create a model of an AI in a strategic game that can interact with human players, such as Chess or a board game.

GD3073 SPECIAL TOPICS IN GAME DESIGN STUDIES

(3 units)

Pre-requisite(s): None

Course Description: Different studies are designed to give students a range of current ideas and respond to new interests of the faculty. The focus is on expanding practical knowledge in the areas of design, type and programming. Time will be spent through in-class exercises to develop technical skills beyond the fundamental level courses and at an advanced level. These activities, as directed by the individual specialty of the faculty, also offer students a guideline for creating a professional portfolio. The range of topics may include world-building, advanced asset production, animation for games, experimental technologies, interaction design, serious games, educational applications, and simulation, among others.

GD3083 GAME DESIGN INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The aims of the internship are to provide a direct link between the academic core of the course and the disciplines and methods of practise; to enable students to experience aspects of practise and provide the opportunity for them to work in areas of the field outside their specific expertise; to enable students to observe, analyse and comment on the interaction between theoretical and practical issues as it is practised, and to establish connections between practise and the development of relevant research programs and suggest appropriate research directions so as to improve the complementarities of theory to practice.

GD3093 TRANSCULTURAL STUDIES OF GAME

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the interdisciplinary field of Game Studies, exploring video games and other forms of play as transcultural, artistic, and social phenomena. Students will examine game design, player communities, narrative structures, and the broader impact of games on society across different cultures. The course will cover key concepts in game studies, such as anthropology of play, game mechanics, game narrative, aesthetics, and the game industry.

GD4003 SOUND DESIGN AND MUSIC FOR GAMES

(3 units)

Pre-requisite(s): None

Course Description: The course broadly covers two Areas of Study: AoS1 Concept of Game Sound and Music will provide an overview of game sound and music development. Different genres of game music will also be introduced to promote students' in-class discussions. AoS2 Game music and sound production will introduce students to music composing, Foley and dialogue will deal with recording and audio design and editing. Working in small groups,

students will complete various tasks designed to reinforce learning of technical skills related to game music and sound production. Applications of game audio implementation such as FMOD will also be introduced to help students complete their interactive sound design in games.

GD4013 FINAL YEAR PROJECT (GD)

(3 units)

Pre-requisite(s): None

Course Description: This course engages the student in supervised independent game-based research or industry- focused project work. The course aims to provide an opportunity for students to develop their own research interests ahead of postgraduate studies or address critical issues relevant to the game industry. As a result of this course, students will design, create and produce a finished game-based project independently and with the supervisor's guidance.

GD4023 BACKEND GAME DEVELOPMENT

(3 units)

Pre-requisite(s): COMP1023 FOUNDATIONS OF C PROGRAMMING

Course Description: The topics covered in the course will include backend architecture, networking and client-server architecture, an adaptation of game engines, embedding script languages and multithreading. Students will also develop network-compatible and multiplayer games with a client-server structure using an engine, leading to a dedicated server, and optimise them utilising multithreading. In programming assignments and projects, students will demonstrate their practical applications of the class topics.

GD4033 EXTENDED REALITY (XR) APPLICATIONS AND TECHNOLOGY

(3 units)

Pre-requisite(s): GD1003 FOUNDATIONS OF PROGRAMMING FOR GAME DESIGN

Course Description: This course covers the programming and technical design foundation required to implement cutting-edge game development for immersive environments in current and future Extended Reality (XR), such as virtual, augmented and mixed reality. Virtual reality (VR) and augmented reality (AR) offer game developers new possibilities to extend the sensorial environment of players extending reality through technology. Virtual reality relies on an alternative setting to experience, while augmented reality improves existent elements with additional layers of media. These technologies offer immersive potential and significant challenges at the forefront of immersive media used for: social interaction such as communication, entertainment and games; education; tourism; areas of purchase/sale and presentation.

GD4043 EXPERIMENTAL GAME RESEARCH

(3 units)

Pre-requisite(s): None

Course Description: Taking game design beyond commercial applications, the academic field long ago adopted game design methods, gamification and game studies findings to various inquiry fields, such as education, medical simulations, robotics, artificial intelligence abstraction, space engineering, biological simulations and interactive art. In this course, students explore game design applications beyond the core area of game development and instead focus on the capabilities of game design as research methodology capable of answering problems posed in a variety of academic fields.

GDST1083 WEB PUBLISHING: THE SCIENCE BEHIND THE CONTENT ON THE WEB

(3 units)

Pre-requisite(s): None

Course Description: The course will demonstrate the importance of content in the design and development of publishing on the Internet. The students will take a look at the different approaches of gathering and analysing data to make a well informed decision on delivering the content to the right audience. They will learn how to choose the right tools and deliver a strategically built website. The process requires no previous knowledge of a programming language or web designing skills.

GERM1023 GERMAN I

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to German language. Designed for students with no prior knowledge of the German language, the course aims at building students' linguistic and communicative skills in the four areas of language learning, i.e. listening, speaking, reading and writing according to CEFR A1.1 (Common European Framework of Reference for Languages) as well as to enable students to apply communication strategies in the target language. Besides, students will gain a brief insight into German speaking culture(s) and develop « cultural literacy » towards the German cultural area at a basic level.

GERM2013 GERMAN CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course offers literary, historical, and socio-cultural entry points into German cultural and political developments, including the German role in the European Union and Germany's contemporary significance as a migration society. Students will connect important events in German history to textual representation in multiple genres and media and develop their analytic, critical, and creative abilities as well as their writing, presentation, and teamwork skills by examining texts and scholarship that explore German identity, memory, empire, nation, cosmopolitanism, and migration.

GFHC1003 RELIGION AND THE ARTS: EASTERN TRADITIONS

(3 units)

Pre-requisite(s): None

Course Description: This course helps students to develop an awareness of the history of living religions in the East and their relevance to world history. Students will be reading chapters from the assigned book to gain a basic knowledge of all major forms of eastern religions and formulate a reflective way to see how religious traditions respond to key themes of human civilization.

GFHC1013 RELIGION AND THE ARTS: WESTERN TRADITIONS

(3 units)

Pre-requisite(s): None

Course Description: 1. Helping students to develop an awareness of world religions and its traditions in the West, including their relevance to global civilization and worldviews that are different from their own. 2. Students will study a broad range of western classics in addition to the assigned readings.

GFHC1023 TRADITIONAL EAST ASIA

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide first year undergraduates an introduction to various forms of culture in traditional East Asia, including traditional Chinese, Japanese, and Korean culture. The course will be divided into two major sections. The first section highlights and explores the foundational themes of East Asian culture from antiquity, including religious and philosophical beliefs (Confucianism and Buddhism), literature, art, architecture, and women's virtues. The second section examines the similarities and differences between Chinese, Japanese and Korean traditional cultures. By the end of the course, students are expected to have developed a critical reading and thinking ability to explore the question of what constitutes "East Asia", and to critically examine the shared cultural elements that are widely considered to constitute "East Asian culture", both historically and today.

GFHC1033 SOUTH ASIAN CIVILIZATION

(3 units)

Pre-requisite(s): None

Course Description: South Asia is the land which gave birth to one of the world's oldest civilizations – the Indus Valley civilization, which was expanded all over the northwestern part of the Indian subcontinent from the 4th to the 2nd millennium BC. South Asia is also the cradle of major religious traditions such as Hinduism, Buddhism, Jainism, and so on. This course is interdisciplinary in spirit and aims to broaden students' horizon on South Asian civilization, which originated in various regions of the Indian subcontinent and whose influence extended all over South and Southeast Asia in different points of the history. The living heritages of the civilization could still be found in places such as Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka, Bali in Indonesia, Siem Reap in Cambodia, etc. Students will gain in-depth understanding on various issues related to South Asian history, culture, and society and enlighten their intellectual horizon.

GFHC1043 HISTORY OF SOUTHEAST ASIA

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide first year undergraduates with a foundational overview of the history of Southeast Asia from the rise of classical indigenous states to the advent of Western imperialism beginning in the sixteenth century, and concludes with the nationalist movements of the mid-twentieth century. Crossing both national and regional perspectives, this course will introduce students to key elements of Southeast Asian history, geography, language, religion and popular beliefs, artistic achievement, maritime and overland trade, state formation, gender, and social relations. Throughout the course students are guided to identify and recognize Southeast Asia's interactions with the outside world, such as India, China, and Europe, and enhance their comparative analytical and critical thinking skills by examining the ways in which Southeast Asians adapted and were influenced by new external ideas and technologies.

GFHC1053 MIDDLE EASTERN CIVILIZATIONS

(3 units)

Pre-requisite(s): None

Course Description: The Middle East occupies a central position in the geography of the world and in the development of modern politics and economic relations. The history of the region is particularly rich, since it is the cradle of some of the oldest civilizations. The rise and fall of those civilizations have led to a diversity of languages, literatures, cultures, religions and beliefs enduring to this day. In modern times, a further factor in cementing the centrality and turbulence of the Middle East is its dominance in the production of oil, the most important energy source in the industrial world. This course aims to clarify the stages of historical development in the Middle East, the causes of social change, and the major figures on the stage of political action. The course begins with the earliest civilizations and follows the region's development systematically through to the late twentieth century. By the end of the course the student will be able identify and understand the long-term trends that have shaped the modern Middle East.

GFHC1063 MODERN WESTERN THOUGHT AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to the history of modern Western ideas and culture. As such, it seeks to acquaint students with the central developments in Western thought and culture from the middle of the eighteenth century to the present. It offers a comprehensive exploration of these developments, through a scrutiny of their main aspects, origins, nature, and evolution. The general pedagogical objective of the course is to cultivate in students the ability to "use historical and cultural perspectives to gain insight into contemporary issues."

GFHC1073 EXPLORING PHILOSOPHY

(3 units)

Pre-requisite(s): None

Course Description: This course will explore fundamental issues from the Western philosophical tradition in a topic-based format, providing an accessible introduction to metaphysics, epistemology, ethics and values from both classic and modern perspectives. This course will introduce and analyse concerns that are fundamental to who we are, what is the nature of the world around us and how we want to live.

GFHC1073 EXPLORING WESTERN PHILOSOPHY

(3 units)

Pre-requisite(s): None

Course Description: This course will explore fundamental ideas of the Western philosophical tradition from a historical perspective. Its objective is to enable students to analyze and think critically about Western philosophical thought on metaphysics, ontology, epistemology, politics, ethics, gender, the meaning of human life.

GFHC1083 SOCIOLOGY AND MODERN SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: The course begins by the introduction of the history of sociology as an academic discipline. This will be done by tracing the intellectual origin and formation of sociology to the Enlightenment, and by way of studying the intellectual legacies of the founding fathers of sociology from both Europe and America. The course will then cover important social institutions, social processes and formation of modern society. Also, the instructor will guide students in their survey of introductory sociological literature.

GFHC1093 GENDER, FAMILY AND MARRIAGE

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to introduce undergraduates to the study of gender, family and marriage. The course will be divided into three major sections. The first section begins with conceptualizing gender, family, and marriage and a historical review of the issues. This section will examine the multidisciplinary foundation of an academic field known today as gender studies and its relation with family and marriage. The second section will explore family dynamics in Asia and the West through comparative discussions on selected themes such as gender, sexuality, economy, social organization, polity, and religion. The last section will explore the usefulness of literature, video documentary and film in the study of gender, family and marriage.

GFHC1103 HISTORY OF CONTEMPORARY ECONOMIC THOUGHT IN AN INTERDISCIPLINARY PERSPECTIVE

(3 units)

Pre-requisite(s): None

Course Description: The main objective of this course is to provide students with a journey of historical evolution of the contemporary economic thought, from an interdisciplinary approach, to understand how economic thought have shaped the contemporary society, politics, economic development, and science. This course traces the history of modern western economic thought as well as the evolution of economic thought behind the policy-making process during the 40-year Chinese economic and market reforms since 1978. The focus of the course will be on the interactions between technological progress, the dynamics of social and political environments, business, and economics.

GFQR1003 A JOURNEY WITH DATA

(3 units)

Pre-requisite(s): None

Course Description: The purpose of this course is to help students realise how data is transformed into a valuable asset and how living in a data-driven society changes their daily life. This course introduces the four stages of data evolution: data, information, knowledge, and insight. Each stage explains different characteristics of data, so students will be able to handle data and interpret data analysis (data literacy) in a way that enriches their lives in a big data era. At each stage, data-related social issues related to data will be discussed in a way that broadens students' point of view. Contrary to the overall perception of students, being data literacy is not difficult. In this course, students will learn how to use a very easy but powerful data handling tool rather than learning complex coding and mathematical formulae. Using the data handing tools, students will learn the process of transforming data into a meaningful asset, to actively experience the benefits of data literacy.

GFHC1113 CHINA AND EARLY CIVILIZATIONS

(3 units)

Pre-requisite(s): None

Course Description: By comparing China with other early civilizations (Mesopotamia, Egypt, Greece and Rome, Mesoamerica), this course will encourage students to inquire what makes the Chinese culture unique -- but also what features it shares in common with other civilizations. The course will prioritize the cultural traits that continue to influence the Chinese society today. Students shall familiarize themselves with key historical sources from ancient China and other regions, relevant anthropological theories and recent archaeological discoveries that help to clarify China's essential role in human civilization. The course's overall aim is to foster a stronger and well-informed appreciation of Chinese culture, as well as a respectful understanding of other civilizations.

GFHC1123 EXAMINING WORLD LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: This course will offer a historical and comparative view of major texts in the history of world literature and thought, from antiquity to the present. We will situate texts in historical contexts and raise questions about the transformation of the literary and cultural canon. How have the concepts of literature and culture themselves transformed throughout times and what role did they play in other fields such as politics or economics? And vice versa, how have scientific or political developments influenced literary and cultural products? How do such important notions as story, memory or imagination come to play a role in the history of culture? The goal will be to explore points of cross-cultural interchange across porous geographic, economic, artistic, and religious boundaries. Readings include authors from Europe, Asia, and the Americas.

Students will develop close reading skills, as well as critical and analytic skills that will allow them to engage in conversation with some of the most influential texts and ideas of all times, while determining the most appropriate tools for their analysis. The course will consist of a combination of lecture, seminar and peer engagement.

GFHC1133 GREAT DISCOVERIES IN WORLD ARCHAEOLOGY

(3 units)

Pre-requisite(s): None

Course Description: Archaeology is the study of the human past through its physical and material traces. This course will narrate some of the major and famous discoveries in the history of archaeology that have transformed our knowledge of humanity. From the excavation of the first humans in East Africa, to the uncovering of ancient cities in Mesopotamia, Egypt, and China, to the discovery of Tutankhamun's tomb or the Terracotta Warriors, this subject will demonstrate what archaeology and archaeological discoveries can tell us about the human story and civilization. In this unit, students will gain an appreciation for archaeological practice as well as diversity of world cultures, learning just how, when, and why societies develop over time.

GFHC1143 THE ANCIENT WORLD TILL 1500

(3 units)

Pre-requisite(s): None

Course Description: This course is a survey of the key developments and features of the Ancient World till 1500, aiming to enhance student understanding of the world today. It examines various classical civilizations and nomadic tribes, intercivilizational encounters and Afro-Eurasian connections, and the cultural and intellectual legacies which laid the foundation of the contemporary world. Students are required to employ an interdisciplinary approach in conducting comparative studies on the varied paths of development of the ancient civilizations and peoples, factors ranging from nature, geography, science and technology, economy, politics to religions.

GFHC1153 SILK ROADS

(3 units)

Pre-requisite(s): None

Course Description: The Silk Roads, that is, the series of paths proceeding from China to the Mediterranean Sea by land, through Central Asia, or by sea, have been always a major vehicle of exchanging material and cultural products, as well as a medium of language contact and transmission of religions, philosophies, and ideas. This course discusses the development of the Silk Roads in space and time, from antiquity up to the present Chinese project of "One Belt – One Road". We will study the history of the most important commercial and cultural sites of the ancient Silk Road, such as Samarkand, Bukhara, Kroraina, Khotan, Kucha, Turfan, etc. We will show images from these sites and we will read texts from their languages, such as Sogdian, Khotanese, Khorasmian, Tocharian, Old Turkish, etc. These texts offer ample evidence of trade, treaties and wars, which brought about dramatic changes in the geopolitical structure of Central Asia – an example of this is the establishment of Muslim colonies in originally Buddhist sites by means of military campaigns. All this will help us to reconstruct the history of the routes of the Silk Roads and their contribution to the relationship between East and West.

GFHC1163 AMERICAN CIVILIZATIONS

(3 units)

Pre-requisite(s): None

Course Description: The Americas have been the home of civilizations for thousands of years. This course aims to provide an overview of American civilizations by focusing on two themes: 1) indigenous civilizations of North America, Mesoamerica and South America; 2) modern American civilization, focusing primarily on the history, culture and influence of the United States and the larger nations in Latin America. Within these themes the course may include the following subthemes: the history of indigenous peoples in their economic development, urban development, environmental practices, religions and cultural evolution (medicine, technologies, foods); the goals and impact of colonialism; the political interactions between European powers in the evolution and identity of American nations; the significance of slavery in the economies, politics and cultures of the Americas; the role of the Caribbean islands; the development of transportation systems (Panama Canal, transcontinental railroads); the formation of cultural and national borders; the impact of modern corporations.

GFHC1173 GREAT CITIES

(3 units)

Pre-requisite(s): None

Course Description: The primary characteristic of a civilization is the rise of cities. The first great cities appeared at least 6000 years ago, and eventually the building of cities has become a standard feature in all industrialized cultures around the world. The history of cities shows that they are as diverse as the cultures that created them. Some cities that have been lost to history had valuable qualities that modern cities lack, and some cities existed in circumstances that are mysterious and not yet fully understood. This course explores the history of a selection of great cities in history, highlighting their strengths and weaknesses, outlining their rise and fall, and comparing them to our city-building practices today.

GFHC1183 KEY PHILOSOPHICAL MOTIFS IN ARTS: LOVE, DEATH, AND SUFFERING

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to introduce the audience into the basic philosophical discussions about three key concepts, and the related literary, visual and acoustic works. Since the course is conducted from the perspective of cultural history rather than systematic philosophy, the content belongs more to the category "culture and civilization."

GFHC1203 CREATIVE AND MEDIA INDUSTRIES

(3 units)

Pre-requisite(s): None

Course Description: This course explores the historical evolution of creative and media industry sectors such as advertising, film, IT, software, music, performing arts and publishing, emphasizing their roles within historical and civilizational contexts. Students will examine how historical events and cultural shifts have shaped these industries and their reciprocal impact on cultural, social, political, economic, and scientific spheres. The course underscores the dynamic relationship between historical developments and contemporary digital connectivity, highlighting the media's role in documenting and influencing human creations and institutions. Through assignments, lectures, and projects, students will assess global media industry regulations and practices, gaining insights into the historical roots and modern dynamics of creative media industries worldwide.

GFQR1013 HANDS ON DATA ANALYTICS FOR EVERYONE

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with basic knowledge and skills to manipulate and analyze quantitative data. Basic concepts of the whole life cycle of data processing from data acquisition, data cleansing, and data mining to data interpretation/visualization will be covered. Emphasis will be given to the learning modern computer software to handle both small and big data. By walking through real world examples from various disciplines, students will learn skills on how to understand, interpret, critique and make decisions based on facts and data. Theories on mathematical modeling and statistics will be mentioned when necessary but not emphasized.

Students from all majors would benefit from the course by relating

data analytics skills to problems in their own field of interest.

GFQR1023 DATA ANALYTICS FOR BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: This is an introductory data analytics course designed to give students the ability to evaluate business problems using descriptive and inferential statistics. Topics will encompass sampling techniques, descriptive statistics and data analysis, hypothesis testing, regression and forecasting. Learning objectives for each topic are reinforced with business problems and/or small case studies. On successfully completing this subject, students from different disciplinary will be able to:
(1) Demonstrate a basic understanding of theories and concepts of statistics especially in business scenarios. (2) Emphases on what, how, when and why certain statistical methods can and cannot be applied for business problems. (3) Solving real business problems by statistics software SPSS. (4) Fostering knowledge in statistics and awareness of some phony statistics around us and the problem of credibility of some claims.

GFQR1033 STATISTICS IN OUR DAILY LIFE

(3 units)

Pre-requisite(s): None

Course Description: To make students realize that we are surrounded by data and the importance of statistical literates to interpret these data and make informed decisions based on data. Statistical methods will be presented with a focus on understanding both the suitability of the method and the meaning of the result. Critical thinking and interpretation will be stressed and statistics concepts and controversies will be discussed in depth. Students are required to use Excel to solve real problem in group projects and present the related results.

GFQR1053 PROBABILITY THEORY WITH AI-AIDED BUSINESS APPLICATIONS

(3 units)

Pre-requisite(s): None

Course Description: Probability and statistics are potent tools that empower individuals and organizations to make well- informed decisions and predictions based on data. Understanding the fundamentals of probability theory and statistical techniques is essential for various fields, from finance, economics, and business to engineering and social sciences. This course is designed to equip students with an understanding of the essentials of probability and statistics for decision-making. It introduces the fundamental concepts of probability, descriptive and inferential statistics, sampling, and regression and their applications in artificial intelligence-aided decisions. The course aims to provide practical knowledge that bridges theory with real-world AI applications.

GFVM1003 BUSINESS ETHICS AND CORPORATE SOCIAL RESPONSIBILITY

(3 units)

Pre-requisite(s): None

Course Description: This course covers a wide range of topics intended to increase students' awareness of the ethical issues encountered by organizations and professionals that border around values conflict, conflict of interest, bribery, fraud, climate change, workplace surveillance, and individual moral conscience. It is also designed to educate students about corporate social responsibility (CSR) with its legal, personal, and moral implications. The course adopts an interdisciplinary approach and enables students to develop a deep understanding of how to act responsibly, make decisions grounded on sound ethical reasoning, and apply their personal values to resolve dilemmas in business and social situations. This course introduces students to an array of principles and new perspectives that will encourage reflection on moral beliefs and practices o contest students' pre-existing ideas and beliefs. It will enable them to operate ethically and develop perspectives that are sensitive to growing diverse and integrated world. Weekly case discussions, assignments, and group projects will be used to explore the topics and issues in this course.

GFVM1013 APPLIED ETHICS IN CULTURE AND CREATIVITY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to nurture a greater awareness of ethical concerns as they pertain to a variety of creative practices within a global spectrum of societies and cultures, and to develop an acute sense of social responsibility in the process of generating one's own creative products

GFVM1023 APPLIED ETHICS: AN INTERDISCIPLINARY EXPLORATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to identify and reflect on ethical issues, and to critically analyse ethical arguments in an informed and thoughtful way, gain familiarity with the major issues and prominent positions in contemporary applied ethics, foster lifelong learning, an inquiring spirit and critical perspective on moral beliefs and practices, and engage students in debates, study particular cases, and discuss the major ethical and moral arguments as presented in one or more philosophical, cultural, and /or religious traditions.

GFVM1033 ETHICS IN AN ERA OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

(3 units)

Pre-requisite(s): None

Course Description: This course will cover philosophical dilemmas that arise from the development and adoption of new AI and robotics technologies. It will help students achieve a better understanding of basic ethical principles that will enable them to critically evaluate different arguments and to formulate their own solutions to both current and anticipated challenges. The course will also train students to identify, apply, and critically reflect on the ethics of living alongside AI and robots in a state of balanced co-existence.

GFVM1043 ETHICS IN DAILY LIFE AND LIFE SCIENCES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help students recognize the basic principles of ethics in daily life and life sciences. Furthermore, this course will inspire students to think and discuss

critically on the ethical cases in the intersection of society and life sciences. In the learning process, students will review some hot and common topics in related to applied ethics of life sciences such as environmental ethics, ethics in food industry and nutritional clinics, and ethics in applied psychology. In addition, scientific research in academic especially life sciences could raise some ethical issues about the use of organisms and humans. This course will teach students how to perform ethical academic work and research fulfilling the professional standards and requirements.

GFVM1063 MEDIA ETHICS

(3 units)

Pre-requisite(s): None
Course Description: This course aims to introduce students to ethical principles and standards through a multidisciplinary approach. The course will focus on both philosophical and practical approaches to understanding and resolving ethical dilemmas in media-related professions such as journalism, advertising, public relations, arts, and entertainment. It will also address ethical issues that arise from daily media usage.

GH2003 PRINCIPLES OF GLOBAL HEALTH

(3 units)

Pre-requisite(s): None
Course Description: The main aim of the course is to describe and analyze variation in health between and within countries. This will provide an understanding of causes of the variation. The course will include measurements and determinants of health. Further, the course offers a public health perspective of the global burden of diseases.

GH2013 LIFESTYLE IN HEALTH AND DISEASE

(3 units)

Pre-requisite(s): None
Course Description: This course aims to help students understand the relationship among lifestyles, and health and disease development. During the course, students will be able to: 1. explain the impacts of lifestyle on longevity; 2. analyze the interrelationships among the dimensions of well-being; and 3. identify factors that promote or impede community connectedness and health equity.

GH2023 ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES

(3 units)

Pre-requisite(s): None
Course Description: Students will have the knowledge and skills to: 1. identify environmental health hazards; 2. describe gaps in knowledge and in the approaches to solving environmental health problems; 3. implement strategies for mitigating environmental health risks and for the prevention and/or control of such hazards; and 4. communicate effectively about environmental health hazards and strategies for mitigating risks.

GH3003 GLOBALIZATION AND HEALTH

(3 units)

Pre-requisite(s): None
Course Description: This course aims to give students a conceptual and practical understanding of the multiple and complex links between various forms of global change (i.e. environmental, food production, economic, political, technological and social) and human health worldwide. This course covers the theory of globalization and aims to link this to real life events taking place today which affect health globally.

GH4003 HEALTH SYSTEM, POLICY AND MANAGEMENT

(3 units)

Pre-requisite(s): None
Course Description: This course aims to develop health industry workers and leaders who will influence policy and manage organizations to improve and protect the public's health. Student will be prepared to develop, implement, and evaluate policies and management strategies in health care and public health.

GLD1003 INTRODUCTION TO GLOBAL STUDIES

(3 units)

Pre-requisite(s): None
Course Description: This course intends to familiarize Year 1 GAD students with basic concepts of world geography - and in particular human geography - which are essential for them to better make sense of the transnational socio-political and economic dynamics assessed in Year 2-Year 4 major courses. The course will introduce students to contemporary geography with particular focus on population, migration, linguistic and religious identities, nations, states, socio-economic development.

GLD2003 THE GLOBAL ECONOMY

(3 units)

Pre-requisite(s): None
Course Description: The objective of this course is to serve as a basic introduction to the study of world economy and its governance. It will examine key institutions, their functions and interactions, as well as the drivers and impact of relevant contemporary economic strategies implemented both in the developed and in the developing world.

GLD2013 INTERNATIONAL COOPERATION AND WORLD ORDER

(3 units)

Pre-requisite(s): None
Course Description: This course aims to investigate the various analytical frameworks in the field of international cooperation with a review of the dominant paradigms that affect the contemporary world order. The purpose of this course is to review a wide range of the literature concerning the study of cooperation and interdependence in the global society, and particularly the theoretical material concerning international relations, world order, regional integration, and global institutions.

GLD2023 REGIONAL COOPERATION AND INTEGRATION: THE ASEAN

(3 units)

Pre-requisite(s): None
Course Description: This is the course designed to assess ASEAN as a major regional actor. No other region in the world can match the cultural, religious, linguistic, and ethnic diversity of Southeast Asia; however, if one were looking around the world for examples

of successful regional cooperation, Southeast Asia would be at the top of the list. What makes ASEAN truly remarkable? This course will question what influences the regional dynamics and integration among Southeast Asian countries, including their social, cultural, and economic behaviour.

GLD2033 GLOBAL POLITICAL ECONOMY

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to serve as a basic introduction to the study of the global economy. We will examine key institutions, functions, systems and trends, so as to make sense of how global economic governance and resource allocations affect societies across the world today, especially in regard to their development patterns.

GLD2043 PRINCIPLES OF DEVELOPMENT ECONOMICS

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to introduce students to fundamental concepts of development economics, providing them with a thorough and engaging introduction to overarching theories, pressing policy issues, as well as latest research trends. The course will employ a global, policy-oriented perspective presenting economic theory in the context of crucial policy debates and country-specific case studies from across the world, in order to stimulate students' appreciation of the relationship between theoretical frameworks and "real world" dynamics, especially across the vast Global South.

GLD2053 GLOBAL DIGITAL TRANSFORMATION: AI, IOT AND BLOCKCHAIN

(3 units)

Pre-requisite(s): None

Course Description: Major breakthroughs in the field of information technology and electronics in the past two decades have paved the way for a renewed wave of digital transformation of the economy through the utilization of Artificial Intelligence (AI), Internet of Things (IoT), and Blockchain. The aims of this course are, first, to familiarize students with said technologies and, second, to let students examine and discuss how they can be employed – or have actually been employed thus far – for broader economic development, in particular in the context of sustainable development governance and the UN Sustainable Development Agenda 2030, at both national and international levels.

GLD2063 INTERNATIONAL ORGANIZATIONS STUDY AND FIELD TRIP

(3 units)

Pre-requisite(s): None

Course Description: This course uses a field trip format to guide students to visit, observe and discuss selected international organizations in their headquarters/offices in Beijing, PRC. Students will have opportunity to confront their prior classroom knowledge with observations they gather in the course of a 1-week stay. They will hear lectures by insiders and practitioners, discuss with them, and learn to understand the role of international institutions in global affairs. The trip will encourage students to practice intercultural communication, and apply skills and competencies contributing to their role of responsible citizens and future servant leaders. They will have a chance to identify areas of their own interest, as well as opportunities for their own international career.

GLD2073 ARTIFICIAL INTELLIGENCE FOR SUSTAINABLE DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course explores the intersection of artificial intelligence (AI) and sustainable development, with a focus on the United Nations' 2030 Agenda and the Sustainable Development Goals (SDGs). Students will gain an understanding of how AI technologies can drive progress toward social, economic, and environmental sustainability, while also critically examining the ethical, infrastructural, and policy challenges that arise from their deployment. Through a combination of theoretical discussions and case studies, the course will equip students with the knowledge to assess AI-driven solutions for global challenges such as climate change, poverty reduction, and inclusive economic growth. Key topics include AI applications in resource management, digital capacity building, ethical AI governance, and the role of AI in fostering social inclusion. By the end of the course, students will be able to critically evaluate AI's role in sustainable development and propose responsible AI-driven strategies for achieving the SDGs.

GLD3003 PUBLIC-PRIVATE PARTNERSHIPS FOR DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: The major objective of the course is to provide an understanding of the key principles and components of Public-Private Partnerships (PPPs), the role of PPPs in the delivery of socio-economic development as well as the opportunities and challenges of procuring and maintaining public services in various fields through effective PPPs, particularly in emerging markets.

GLD3013 REGIONAL COOPERATION AND INTEGRATION: THE EU

(3 units)

Pre-requisite(s): None

Course Description: The course examines the causes and historical evolution of European integration and then looks analytically at the institutions and the policies of the European Union, assessing their effectiveness and investigating their implications for the rest of the world. It provides a focused examination of the economy of European integration, and highlights the dynamic relationship between economic and social integration and the respective roles of the state, markets and EU institutions.

GLD3023 GLOBALISATION: TRENDS, ISSUES AND OPPORTUNITIES

(3 units)

Pre-requisite(s): None

Course Description: As the world grows more integrated, as communication and business speed up the changes in our daily lives, the impact of events on our lifestyles deepens, and the necessity to understand and react intelligently to events and forces affecting us becomes more imperative. Lectures are used to inform and provoke students to apply concepts and data acquired in their time of study to current problems facing the global order, and thus, to themselves,

their families, and their careers and regimes which play such a vital role in today's world.

GLD3033 DEVELOPMENT IN POST-COLONIAL BRITISH COMMONWEALTH

(3 units)

Pre-requisite(s): None

Course Description: This course intends to familiarise students with development trajectories and governance patterns across the former British colonies spanning from South Asia to Africa and the Americas.

GLD3043 DEVELOPMENT IN EASTERN EUROPE AND CENTRAL ASIA

(3 units)

Pre-requisite(s): None

Course Description: This course aims at providing students with introductory information on governance, society and socio-economic development in Eastern Europe and Central Asia. It identifies opportunities as well as challenges that countries in the region encounter. It seeks to establish a basis for independent study and research of specific regional issues.

GLD3053 ASIA IN THE AGE OF GLOBALISATION

(3 units)

Pre-requisite(s): None

Course Description: This course is a study of Asian social and economic development. This course intends to examine the relationship between interdependence and integration within the international context, and trace patterns that help students to understand the complexities and variations in Asia's paths to the present. This course will discuss intra- and inter-regional bilateral as well as multilateral cooperation patterns, drivers, and interaction platforms (e.g. APEC, WTO, EAS, RCEP, and other different configurations etc.).

GLD3063 DATA ANALYSIS FOR SOCIAL SCIENCES

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to data analysis in the field of social sciences. The purpose of this course is to provide basic understanding and background essential to the learning of applied data science and statistics skills. The material will cover both descriptive and inferential techniques for analysing multivariate, categorical, and continuous data with the primary objective being two-fields: (1) relaying the underlying theories, appropriate applications, and limitations of various procedures; (2) using statistical software packages to properly analyse the interpret results.

GLD3073 PRINCIPLES OF NEGOTIATION

(3 units)

Pre-requisite(s): None

Course Description: Negotiations are a particular kind of social interactions that are explicitly designed to determine which parties get their interests and goals. Negotiations are necessary whenever you cannot attain your goals without the cooperation of others. This course is an introduction to the knowledge of the negotiation skills and techniques. This course will focus on the theoretical arguments of negotiation techniques, using rational choice theory, game theory, and decision-making models to analyse the critical components during negotiation. The purpose of this course is to look into the methodological underpinnings of such a negotiation approach, and to introduce the students to its applications in various fields in social science.

GLD3083 CHINA'S GLOBAL PARTNERSHIPS FOR SHARED PROSPERITY

(3 units)

Pre-requisite(s): None

Course Description: The course aims at familiarising students with China's constructive economic engagement across the world, along the One Belt One Road, and beyond. Particular attention will be dedicated to China's win-win cooperation mechanisms and outcomes, in relation to both established and emerging actors.

GLD3093 RURAL ECONOMIC DEVELOPMENT AND TRANSFORMATION IN GLOBALISING CHINA

(3 units)

Pre-requisite(s): None

Course Description: This course aims at familiarizing students with the most relevant, up-to-date trends of rural economic reforms and development in China in the age of globalisation. The course intends to highlight the historical and on-going reforms in rural countryside and its development's drivers, constraints, challenges and prospects, at a time of a new wave of industrialization, urbanization and transnational economic integration.

GLD3103 PROJECT MANAGEMENT IN INTERNATIONAL DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: The course will provide students with an overview of the current context, key issues and practice of international development, and introduces students to the essentials of project management and the use of the Logframe approach to prepare project proposals. Real life case studies will be used to demonstrate the application of theory to practice. The course will also give students an opportunity to apply class learning to practice through the development of a full proposal of a development project of choice for funding purpose.

GLD3113 INTERNATIONAL DEVELOPMENT THEORY AND PRACTICE

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to help students familiarise themselves with the most relevant theories institutional architecture, and practice of contemporary international development. They will be exposed to the role of different actors – such as state, non-governmental organizations (NGOs), official development assistance (ODA) agencies, multilateral agencies, and businesses – and evaluate a range of theories spanning from modernization to dependency, to neoliberal and post-development. The course will also address implementation processes and consequences of development initiatives and projects in particular regard to growth, inequality, poverty, capacity building and sustainability.

GLD3123 PUBLIC ADMINISTRATION FOR THE DIGITAL SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course aims at introducing students to fundamental concepts of public administration, to be effectively and concretely employed in the modern-day governmental, non-profit and private sectors. Particular attention is therefore paid to placing traditional public administration notions within the context of an ever-evolving, interconnected world, in which technological progress drives change at both local and global levels, and to leading students to analyse, synthesise, think critically and ultimately solve problems in a complex and dynamic environment - as per NASPAA standards. Topics to be covered shall thus include the role of bureaucracy in the political process, basic theories of public organization and management, public decision-making and leadership, policy implementation and assessment, as well as the changing nature of public administration in light of the growing role played by digital technology in the pursuit of societal progress across ("smart") cities and countries.

GLD3133 PUBLIC FISCAL ADMINISTRATION

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introduction to fiscal administration and the problematics of public finance. It presents an overview of basic concepts, methods and practices related to public finances, including budget process, capital budgeting, taxation, and public debt administration. It pays due attention to the impact of historical and national contexts on the practice of public budgeting. It provides students with basic skills in public budgeting and in interpreting data from relevant policy documents. In adherence to NASPAA standards, the course is designed to train students to lead and manage resources in the public interest and aims to be relevant to those aspiring to work both in public and in non-profit organizations.

GLD3143 SUSTAINABLE CITIES

(3 units)

Pre-requisite(s): None

Course Description: The main objective of this course is to familiarise students with, and find possible solutions for key sustainability challenges faced by major cities around the globe at a time when the number of city dwellers worldwide is expected to grow exponentially, especially across the vast Global South, where intense forces of modern socio-economic development shall continue to draw opportunity-seekers into bustling urban centres. This timely course will, therefore, assess how public governance agencies, together with the private sector and the civil society, can best attempt to fulfil the key targets of the United Nations' Sustainable Development Goal 11 ("Sustainable Cities and Communities") by the year 2030, and thus manage complex issues spanning across the crucially interconnected domains of environment, society and economy, including, but not limited to, land management, housing, transportation, poverty eradication and economic inclusion, as well as energy distribution and waste disposal.

GLD3153 TRANSNATIONAL MIGRATION AND DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: The focus of the course is on the practices, processes, and policies that shape transnational migration and make it consequential for development. It differentiates transnational migration from other major types of long distance migration, including international migration; talent migration; cross-border migration; forced migration, refugee migration and asylum seeking; undocumented migration; diaspora. Key processes that create conditions for, and influence the nature of transnational migration are introduced, and major economic, social, ecological, and political consequences are considered, with emphasis on the role of the migration-development nexus. The particular feature of the course is its adoption of a case-study methodology to emphasise the interdependence of transnational migration and development. To prepare students for their independent research on a topic of their choosing the course examines the making of a journal article on transnationalism.

GLD3163 INTERNSHIP (GAD)

(3 units)

Pre-requisite(s): None

Course Description: This course will allow students to earn college credits for time spent working in the field with NGOs, research institutes, government organizations, media, publishing houses, or the private sector. Since some internships are very demanding of students' time, offering course credits allows them to do the internship while earning credit towards their degree. It also strengthens connections between GAD and institutions that may hire GAD students in the future.

GLD3173 SUSTAINABILITY FRAMEWORKS: FROM SDGS TO ESG

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to familiarise students with the sustainability frameworks that apply to modern corporations and public management agencies: the course will address key "Environmental, Social and Governance" (ESG) criteria now legally required or voluntarily adopted by a number of industries, as well as core targets, indicators and monitoring mechanisms of the 17 Sustainable Development Goals (SDGs) that comprise the United Nations Sustainable Development Agenda 2030. Students will be provided with the analytical tools necessary to appraise a given organisation's overall commitment to relevant standards, as well as its performance towards the achievements of relevant sustainability objectives, in the broader context of a global quest for socially responsible and environmentally sound progress for all.

GLD4003 FINAL YEAR PROJECT (GAD)

(3 units)

Pre-requisite(s): None

Course Description: The Final Year Project consists of an independent research essay that applies academic and creative skills to a specific topic in the Programme. Under the guidance of a supervisor, the student will identify a suitable research or creative topic; find relevant research materials; narrow the topic; read,

evaluate, and interpret materials; write, edit, and polish their final work.

GLD4013 GLOBAL SOUTH IN TRANSITION

(3 units)

Pre-requisite(s): None

Course Description: This is an interdisciplinary course, which explores the recent socio-economic evolution in selected contexts in Asia, Africa and the South Pacific. It focuses on the dynamic interplay and governance of social, economic and environmental forces, in particular regard to sustainable development outcomes and prospects.

GLD4023 TOPICS IN GLOBALISATION AND DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is intentionally designed to be flexible in order to allow discussion of a range of pressing issues in the fields of globalisation and development.

GLD4033 FINAL YEAR PROJECT (GAD)

(6 units)

Pre-requisite(s): None

Course Description: The Final Year Project consists of an independent research essay that applies academic and creative skills to a specific topic relevant to the programme's curriculum. Under the guidance of a supervisor, students will identify a suitable research or creative topic; retrieve relevant existing literature; define a research question; read, evaluate, and interpret related data and literature; write, edit, and polish their final work. In semester 1 of this course students will focus on the early stages of the research and finalize a relevant project proposal. In semester 2 they will proceed with data collection and analysis, discussion, and writing of the final paper.

GTCU2003 COMMERCIAL PHOTOGRAPHY

(3 units)

Pre-requisite(s): None

Course Description: This course is aimed at guiding students in commercial photography, through the study of the different phases of pre-production, production and post-production. Lectures will focus on advertising campaigns of different kinds – such as institutional advertising, commercial campaigns, and e-commerce business. Particular attention will be paid to the techniques used in photography (digital photographic processes) and to the various phases of the design of an advertising campaign. Students will also have the opportunity to acquire basic practical photographic skills, thus gaining a valuable experiential perspective on commercial photography.

GTCU2013 CREATIVE MEDIA AND STRATEGY

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to the language, production technology, and business strategy of creative media. We will use a variety of digital tools to explore narrative and visual structure, while giving students the opportunity to express themselves creatively. Technical information concerning digital photography, video and sound capture will be covered, while examining the principles which connect digital media to business via advertising. The course will raise students' awareness of the creative decisions they will be in a position to make. There will be weekly screening of select media used in business promotion.

GTCU2023 CULTURE AND ART - IMAGES, OBJECTS, THEMES

(3 units)

Pre-requisite(s): None

Course Description: This interdisciplinary course aims to provide students a broad perspective about the cultural and symbolic values of art forms in different countries. Nowadays, art surrounds human beings and influences our lives in various aspects. To understand art enables us to understand our cultures better. No matter from its physical or material values to their cultural values. Through the study of different artworks (2-dimensional or 3-dimensional) during different times of Chinese and Western cultures, students will learn how to describe, analyze, evaluate with a sense of art appreciation. It provides a quick tour from various themes with the lens of artistic development, which produce into creative applications through innovative outputs under the liberal education

GTCU2033 POPULAR MUSIC GENRE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce Popular music through selected musical samples to illustrate its genres followed by history, art, social contexts, and culture. Students will explore perspectives and construct their own theories related to popular music genres, urban cultures and the various sociological implications of these genres: from the relation of Rock and Roll with the happy post-war middle class in the West to the current Global Rap trend as a new representative of Urban music. Students will also develop the knowledge of the operation of the popular music industry, and key concepts in this field. Through assessments and assignments, students will be expected to put into use the terms, concepts, musical skills and sociological approaches presented in the course. Selected musical examples, video clips and music technology will be used throughout the course.

GTCU2043 CORPORATE SUSTAINABILITY AND INDUSTRY INNOVATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims at providing students with a general understanding of the sustainability issues in the globalized world. Students will gain a good knowledge of the impacts of global economic development on individual, business, government, and society. In addition, they will be able to appreciate natural world and seek their contributions towards a better liveable world. As sustainability involves complex issues including social, environmental, economic, governance and ethical dimensions, it requires complex solutions. This course is to train up students with multi-disciplinary skills to solve complex sustainability problems in their workplace, especially through the understanding and application of innovation and communication concepts. Students will also learn how business sustainability reporting and assurance play an important role to communicate with stakeholders on a company's economic, environmental and social management and

performance. In addition to the lectures offered by the instructor, experts from different industries (e.g. manufacturing, service, science, communication) will be invited as speakers to deliver lectures or talks on specific topics. Students who have successfully completed the course would be in a more favourable position to face challenges of complex sustainability issues in their future career.

GTCU2053 BRIDGING CULTURES: TRANSLATION AS COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the significant role of translation in understanding, interpreting, communicating, and (re)constructing cultures. Students will learn to adopt a translational perspective to understand the complexity and hybridity of different cultures. It will introduce students to the theoretical and methodological issues of cultural comparison, cultural transfer, and cultural dialogue from the inter- or cross-disciplinary fields of translation studies, cultural studies, and communication studies. This course will provide students with the opportunity to discuss and explore the challenges, controversies, and misunderstandings occurring in the process of global cultural encounters. It begins by revealing, acknowledging, and analysing the communication blockades in cultural contacts so that students can know the complexities of cultural mediation processes. Then students will learn a translational approach to reflect critically upon binary relationships between national cultures. Throughout the course, students will develop a translational perspective that can facilitate meaningful interaction in cross-cultural contacts.

GTCU2063 LANGUAGE, MEDIA AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: Through examining various major issues in communication and media, this course aims to explore the social and cultural aspects of language as it is used in the world today. Students will develop an understanding of the socio-cultural context within which media operate and critical perspectives on the role of language and media in society today.

GTCU2073 MEDIA AND HEALTH COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide a broad overview of the fields of and theories used to investigate and understand health communication and communication's effect on public understanding. The course content lies at the intersection of mass communication and public health. The class will be useful for you if you are interested in the role of communication in promoting public health or policy development; want to become a better consumer of health information (meaning to assess the credibility, risks and benefits of that information); prepare a career working in health communication (including social marketing, health education and promotion, health industry branding, science communication, patient advocacy, research, and media campaigns and coverage); or want to do research in fields related to health and communications. A heavy focus will be on adapting the knowledge to create public relations and advertising approaches and materials for campaign development aimed at improving the health of society or communicating science to the public. You will be introduced to persuasive theories that are a critical part of designing such messages in an efficacious manner.

GTCU2083 MEDIA LITERACY IN THE DIGITAL AGE

(3 units)

Pre-requisite(s): None

Course Description: As the influence of the internet and new media on society continues to expand, we need to think more fully about the impact this development has on us. Cultural products, such as films and TV, and news media have an increasingly invasive presence in our daily lives, yet there is a general lack critical knowledge about the different influences that impact media production and media content. This course will give students the tools they need to understand how different groups are represented in entertainment media and why that is, along with the instruments they can use to unpack disinformation and fake news in the digital era.

GTCU2093 FOOD CULTURE AND INNOVATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with an overview of food culture and innovation of food. Food is a basic human need; however, beyond biological functions, food also has rich cultural significance. Taste, preference, ritual, tradition, gender, social class and nationality all influence food choices and behaviors. Economics and environmental factors, globalization, localization, and social movements all affect our access and attitudes toward food. In addition, drivers of innovation for consumers and digital food development emphasized the trends for food innovation. The course also aims to strengthen students' understanding of food culture and food science in relations to food health issues. It will bring them the food a food journey that raise their awareness of food production, food consumption and food innovation.

GTCU2113 LOVE STORIES IN MUSIC, LITERATURE, AND THE VISUAL ARTS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to discuss the universal and eternal topic of romantic love, as told by masterpieces in the visual arts, music, and literature. Foremost, students will expand their cultural perspectives by comparing works from diverse media, eras, and genres, with love as the central topic and starting point. Second, students will acquire basic analysis and appreciation skills in the visual arts, music, and literature that they can carry with them well beyond this course. Third, students will connect the fruits of their analysis with relevant historical/biographical information and philosophical ideas in order to observe how societal expectations and attitudes towards love have developed and transformed through the ages.

GTCU2123 EXPLORING CULTURE AND MUSIC IN ASIA

(3 units)

Pre-requisite(s): None

Course Description: The course aims to introduce students to the diversity and development of cultures and music traditions in Asia. It will expand students' understanding of the diversity that has existed and continues to exist in the cultures of East Asia (China, Korea, and Japan), Southeast Asia (Indonesia), South Asia (India)

and Central Asia (Mongolia). This course will guide students to some of the major cultural strands by which people in Asian societies have made their lives meaningful. It will focus on selected and representative musical language and genres at the intersection of historical, cultural, and social aspects of life in Asia. Students will study various performing arts in terms of their relationship to daily life and in providing a sense of place and pride in cultural heritage.

GTCU2133 INNOVATION IN CULTURE AND TOURISM

(3 units)

Pre-requisite(s): None

Course Description: This course aims to explore the intersection of culture and tourism with a focus on the role of innovation in shaping contemporary trends. Students will be able to examine how technology advancements, sustainable approaches, and creative strategies are transforming the culture and tourism sectors. Case studies, industry trends, and hands-on projects will provide insights for students to discover the dynamic relationship between culture, innovation, and tourism. Furthermore, students will be encouraged to create innovative cultural and tourism products or services that appeal to diverse market preferences. Upon completion of the course, students will be able to apply critical thinking and adaptability to navigate the evolving landscape of culture and tourism by embracing innovation and change.

GTCU2143 REVEALING THE UNDOCUMENTED PAST: LINGUISTICS, ARCHAEOLOGY AND HISTORY

(3 units)

Pre-requisite(s): None

Course Description: This course combines linguistics and archaeology to cast light on undocumented areas of history. Linguistics is the scientific study of language as a human capability, languages and their structures. Archaeology is the study of the human past through its physical and material traces. In order to elucidate and exemplify how these two sciences can combine in innovative ways to cast light on hitherto unknown areas of history, this course will narrate some of the most significant such interactions, in the form of lectures whose contents analyse a number of case-studies, in which some problematic questions in history were answered through the joint efforts of linguists and archaeologists. Additionally, each class throws light on how the obstacles encountered in these processes served as a launchpad for creativity and, hence, innovation in the above-mentioned disciplines: From the search for the homeland of the Proto-Indo-European people, to the tracing of unrecorded movements of native people in prehistoric south America, and the gradual peopling of the Indian and Pacific oceans, this course will demonstrate what linguistics and archaeology have achieved by working together, and what the resulting discoveries can tell us about the history of humankind. Students will be introduced to the practices of theoretical and field linguistics and archaeology, as well as to the diversity of world cultures, and the patterns through which societies (including contemporary ones) develop over time. Furthermore, a small number of unresolved issues will be presented, and some likely solutions will be proposed by emphasizing the role of creativity and cutting-edge innovation, both in theoretical frameworks and technology.

GTCU2153 GLOBAL SURREALISM: BUILDING TRANSNATIONAL NETWORKS ACROSS ART HISTORY, LITERATURE, AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: Surrealism is an experimental movement famously inspired by dreams and the unconscious, which combines art history, psychology, literature, media, and culture. This interdisciplinary course explores the aesthetic and political uses of Surrealism by poets, prose writers, artists, critics, performance artists and activists engaged in transnational experimental collaborations in European and non-European contexts from the early twentieth century to the present. In order to prompt insights into the transnational sources and afterlives of Surrealism, the course starts with an overview of the dialogue between French-speaking Western and non-Western authors such as André Breton, Paul Eluard, or Susanne and Aimé Césaire, whose exchanges contributed to Surrealism in the early twentieth century. The course will examine in particular how the anti-colonial movement of Négritude in the first half of the twentieth century made use of Surrealist techniques as a means of societal critique and artistic innovation, and how the cross-cultural work of its members resonates today with the agenda of contemporary so-called minoritarian authors in particular. Besides examining the revolutionary potentials of Surrealism in the early twentieth century, the course asks students to analyze uses of Surrealism by minoritarian authors in the United States and Europe in particular. Finally, the course will also probe the extent to which AI technologies can enact dream-like fantasies and Surrealist hallucinations.

GTSC2003 APPRECIATION OF APPLIED MATH

(3 units)

Pre-requisite(s): None

Course Description: This course provides some selected topics which demonstrate the power of mathematics in real life. The course teaches simple but useful techniques for explaining and solving complex phenomena and using mathematical concepts and ideas. The topics include but are not limited to: postman problem and graph theory, traveling salesman problem, number theory and cryptography, birthday problem and probability, mathematical model of infectious diseases, clover leaf type of overpass, etc. Emphasis is on mathematical thinking and on fostering curiosity about mathematics and real life.

GTSC2013 DIGITAL ECONOMY AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to teach key economic concepts and principles that help describe how the evolution of information technologies and new media has transformed the marketplaces and our everyday life, such as choice, supply, demand, opportunity cost, valuation, pricing, economies of scale and scope, allocation of resources, and competitive markets, all in the context of the ever-changing digitized economy. This course models the economic forces in the context of modern media ecosystem that not only include social media and e-commerce but also music, mobile gaming, open-source economy. Students are expected to add analytical toolkit that can be applied to analysis of digital/media

industries; and explore a number of special and advanced topics in digital economics. The course covers the following topics: Distinctive characteristics of digital economy, multi-sided market theory/empirics, online pricing (e.g. bundling, versioning, and auction), network economics, and the economic impacts of machine learning and artificial intelligence.

GTSC2023 CHEMISTRY IN DAILY LIFE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to Develop a basic understanding of fundamental chemical concepts in the context of ordinary things in our everyday lives. Students will discuss how the chemical universe works and how science and in particular chemistry contribute to the development of new products, medicines, and advances in our standard of living; present and discuss ideas and information concerning science and their effect on the environment, on health, and on the quality of life; evaluate scientific and technical issues and make reasoned judgments on societal issues relating to them; and describe the interconnections among the basic scientific principles with technology found in our homes and workplaces, with advances in technology, and with utilization of natural resources.

GTSC2033 INTERPRETING THE WORLD BY READING FINANCE NEWS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to interpret the financial events which are happening in daily life. It intends to equip learners, through various teaching and learning activities and assessment methods, with skills and knowledge about the financial news, financial instruments, and international financial policies.

GTSC2043 POSITIVE PSYCHOLOGY AND INNOVATIVE TECHNOLOGIES IN EVERYDAY LIFE

(3 units)

Pre-requisite(s): None

Course Description: Synthesized by an interdisciplinary approach, this course aims to explore and embrace human possibilities for self-efficacy, psychological well-being, self-regulation, personal growth, and resilience of people. The emphasis is to understand variable strategies, conceptual models, techniques, and exercises and get them applied in everyday life. Throughout the course, students will acquire knowledge regarding management of negative states (e.g., anxiety, depression, low self-esteem, anger, self-defeating behaviours, etc.). Additionally, students will be equipped with knowledge about innovative technologies of human flourishing for optimizing experiences. This component mainly focuses on ways or best practices for facing everyday demands in life, building relationships with others, coping with stress, organizing the self, adapting to change, accomplishing life goals, etc.

GTSC2053 TELLING A STORY WITH DATA

(3 units)

Pre-requisite(s): None

Course Description: Even as society is inundated with data, we need to comprehend the data and then display its meaning and consequence so it can enlighten current activities and help us to make good policy decisions. The process of handling and displaying data is similar to telling a story. We will study examples of how data is used everywhere. In each of these example, the proper handling and displaying of data are crucial in telling us what is happening and what to do. We will study the methodology of data handling: how data is obtained, processed, analysed and displayed. We will learn to use some computer tools for this methodology. Python is currently the most important tool because it is both powerful and relatively simple to use. In addition, we will examine the ethical issues on using data, such as obtaining data, privacy issues and biases.

GTSC2093 IT FOR SUCCESS IN EVERYDAY LIFE AND WORK

(3 units)

Pre-requisite(s): None

Course Description: This course aims to enhance students' ability to keep track of the latest developments in information technologies and to use modern technologies to access, organise, store, manipulate, interpret and present information, thus empowering them to be more ready for problem solving and creative applications in their respective disciplines and daily life using computer-aided means.

GTSC2103 LIFESTYLE AND HEALTH

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help students to understand the relationship between lifestyles and health. The objectives are to let students explain the impacts of lifestyle on health; promote healthy lifestyle on disease prevention; and understand how research is translated into practical recommendations for disease prevention.

GTSC2113 NUTRITION AND EXERCISE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to promote healthy eating and exercise to against obesogenic environment and recognize the nutritional strategies for enhancing exercise and sport performances. It helps students to understand the physiological impacts of physical activity and nutrition; and provides recommendations on exercise guidelines to people throughout the life cycle.

GTSC2133 ARTIFICIAL INTELLIGENCE (AI) IN BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of Artificial Intelligence (AI) and introduces AI's (especially Generative AI) applications in business and management. Initial focus will be to introduce the range of AI concepts, technologies and terminology commonly used by executives and managers in the industry. Upon learning about the historical developments and foundational concepts, different types of AI technologies and their applications across business functions will be studied from a managerial perspective. To develop strategic thinking and decision-making skills related to AI adoption and AI portfolio management, students will further engage in business case discussions and analysis based on the latest cases, news and articles. A final critical aim is to foster

a managerial mindset in utilizing AI for business and stakeholder value creation.

GTSC2143 MACHINE LEARNING FOR BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: This course teaches the fundamentals of machine learning (a method by which computers learn from data) and its real-world applications. Students will explore tools and techniques such as trend prediction, clustering similar data, identifying patterns, and developing intelligent systems. Examples include categorizing customers based on their behaviors to enhance service, pricing products using data insights, employing tools to assist in selecting job candidates, recommendation systems (like how Netflix suggests films), forecasting future trends (e.g., sales or weather), and creating chatbots for customer support. The course aims to use straightforward examples to demonstrate how these concepts work, aiding students in understanding how machine learning addresses problems in everyday scenarios.

GTSC2153 DESIGN THINKING WITH AI

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the principles of design thinking as tools for solving real-world challenges, with a focus on integrating artificial intelligence. Students will learn the theories, methods, and processes of a user-centered approach to developing solutions by balancing user needs, technological feasibility, and practical viability. The course guides students through understanding user needs, redefining problems, and applying AI tools to support design thinking processes. Through hands-on practice, students will prototype, test, and refine solutions that enhance user experiences and engagement in real-world scenarios.

GTSC2163 RECREATION AND ENTERTAINMENT IN THE AI ERA

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a foundational understanding of how artificial intelligence (AI) intersects with contemporary recreation and entertainment. By introducing core concepts of recreation and entertainment in a technology-driven world, the course encourages interdisciplinary analysis of AI's role in shaping experiences—from personalized entertainment to global cultural trends. Students will develop problem- solving skills through real-world scenarios and inclusive group projects, fostering critical thinking about AI's ethical, societal, and economic implications.

GTSC2173 NATURAL LANGUAGE PROCESSING IN THE HUMANITIES

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to provide students with foundational training in utilizing digital tools to engage with text in innovative ways. We will explore a variety of applications, from basic text editing software like TextEdit to more complex systems such as Pandoc for document conversion and formatting.
Students will gain hands-on experience with Python, delving into libraries and frameworks that facilitate Natural Language Processing (NLP). By employing these tools, participants will learn to analyze, visualize, and interpret texts, enhancing their critical reading skills and broadening their analytical capabilities.

GTSC2183 AI AND GAME LOCALISATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with the knowledge and skills to effectively localise games using AI technologies. By integrating theoretical concepts and hands-on practices, students will gain a comprehensive understanding of the intersection between artificial intelligence and game localisation, addressing cultural, linguistic, and technical challenges in creating globally accessible games.

GTSC2193 DATA VISUALIZATION WITH AI

(3 units)

Pre-requisite(s): None

Course Description: This course uses an exploratory approach to provide students with an overview of data visualization. Using diverse examples from various fields, students would be equipped with the quantitative and qualitative methods to present and describe data effectively. This course would also broader students' knowledge in the developmentand use of artificial intelligence (AI)-aided data analytics and data communication. With project-based approach, students would have plenty hands-on learning experience of data collection, exploration, analytics modelling, presentation and reporting with tools like Microsoft EXCEL, Tableau, Power BI, enhanced by AI tools. The course also emphasizes ethical considerations, future opportunities, and potential risks associated with AI in data analytics.

GTSC2203 DEMYSTIFYING DATA SCIENCE AND AI

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a foundational understanding of data science and AI while exploring their roles and impacts across diverse disciplines. By the end of the course, students will comprehend essential concepts and terminologies, such as machine learning and big data, and understand the data science process from data collection to visualization. They will also recognize real-world applications in fields like healthcare, business, and the arts, and critically evaluate ethical and societal implications. Furthermore, students will gain practical skills to address basic data-related challenges using analytical tools.

GTSC2213 PSYCHOLOGY INSPIRING AI DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: Synthesized by an interdisciplinary approach, this course aims to foster a deep understanding of the interplay between psychology and artificial intelligence (AI), preparing students to appreciate the complex dialogue between human cognition and machine intelligence. This course broadens students' knowledge in both fields and instills the importance of an ethical and human-centered approach to AI development. By exploring the profound influence of psychology on AI, students will be better positioned to contribute to the future of both fields.

GTSU2003 GREEN SUPPLY CHAIN MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: A supply chain network comprises all parties involved in fulfilling a customer's need. Ensuring sustainable activities of these parties, is critical to any successful business. Green supply chain management (SCM) is emerging as a strategic consideration for firms. Organisations are increasingly under scrutiny from stakeholders to assess the impact of operations on the environment and society. Issues related to global warming, waste management, air transport, closed-loop supply chain, and corporate social responsibility reporting are examples of the complex nature of green SCM. Environmental issues and sustainability efforts create opportunities: product innovation can lead to new markets, green sourcing and waste reduction can reduce operating costs, etc, and can present challenges as governments and communities impose higher standards on pollution, resource exploitation, etc. This interdisciplinary course provides a holistic perspective of the environmental, social, economic, and governance aspects of green SCM, and approaches to maximize business performance and to meet the evolving needs of stakeholders. Students will gain knowledge required to facilitate and lead green SCM initiatives. Students will also learn theories and frameworks in green SCM such as the triple bottom line, product life cycle, system thinking, reverse logistics, etc., and the challenges in implementing successful sustainable SCM.

GTSU2013 SOCIAL ENTREPRENEURSHIP

(3 units)

Pre-requisite(s): None

Course Description: The main objective of the course is to understand the role social entrepreneurs can play in the changing economic and social system. Social entrepreneurs address problems where the government, private sector, and traditional non-profit sector fail to achieve systemic impact. Social innovations, which extend and enhance human life and civil society are new strategies, concepts, ideas and organizations that meet the social needs of different elements, which cover working conditions and education to community development and health. This course considers the full spectrum of social business models, including strictly non-profit organizations, enterprises developing revenue-generating products or services for a social goal, and socially responsible for-profit companies. Students will learn the concept of social entrepreneurship while exploring the many mechanisms for and barriers to achieving social impact.

GTSU2023 CARING SOCIETY: FROM CHARITY TO SOCIAL INNOVATION

(3 units)

Pre-requisite(s): None

Course Description: The aims of this course are to provide historical overview on those endeavours promoting Caring Society in different cultures and human societies; foster multidisciplinary understanding on those concepts and theories of developing Caring Society. These include but not limited to: compassion and patronizing pity, charity and philanthropy, feminist ethic of care, human rights and social justice, poverty, welfare state, social policy and social work, interweaving of formal and informal care, sustainable development, corporate social responsibility, social investment and innovation, entrepreneurship; and assess the applicability and utility of those global and local efforts for building Caring Society. Particular emphasis will be given to the development in the context of Mainland China, and the transferability and scalability of oversea experiences to the local context.

GTSU2033 SOCIETY, ECONOMY AND ENVIRONMENT IN THE AGE OF GLOBALISATION

(3 units)

Pre-requisite(s): None

Course Description: This course leads students to develop an informed and intellectually disciplined understanding of globalization. It provides students with concepts in which globalization is conceptualized and discussed; introduces them into associated debates and controversies; and demonstrates the use of relevant facts about the economic, social and political context. Ultimately, students will be able to formulate their own perspective on globalized societies in a theoretically informed manner, critically, and in connection with existing scholarship.

GTSU2043 CLIMATE CHANGE AND SOCIETY: CURRENT STATUS AND A LOOK INTO THE FUTURE

(3 units)

Pre-requisite(s): None

Course Description: This course aims at providing students the basic understanding of the causes of modern climate change, and enables students to comprehend the impacts of modern climate change on those important aspects of our society. Upon completion of this course, students are expected to be able to face the challenges caused by climate change and engage themselves in new daily life practices that may lead to mitigating climate change and achieving a sustainable world in the future

GTSU2053 FOOD SECURITY AND SUSTAINABILITY

(3 units)

Pre-requisite(s): None

Course Description: Upon completion of the course, the students enrolled in the course should be able to: 1) learn the challenges of global food production and its impacts on natural ecosystems, economic, human health, policies, and peaceful world; 2) explain the economic, social, and environmental dimensions of current food production systems; 3) analyze the problems and relevant applications at local, regional, national, and global levels; 4) solve problems using interdisciplinary thinking and explain relevant applications and synergistic benefits of interdisciplinary thinking; and 5) Develop teamwork skills by interacting with other disciplines.

GTSU2063 HOW TO BUILD A GREEN CITY? CHALLENGES AND SOLUTIONS

(3 units)

Pre-requisite(s): None

Course Description: This interdisciplinary course is designed to enable students to apprehend the intricate relationships between economic growth, pollution and health problems and ultimately, their effects on human well being. This course also aims to broaden the students' perspectives on how economics, cultures, educations, and environmental policies and ethics contribute to green city development. Upon finishing the course, students should be able to

comprehend the importance of sustainable development and engage in innovative thinking on current environmental issues in preparing them to face future environmental challenges.

JAP1013 JAPANESE I

(3 units)

Pre-requisite(s): None

Course Description: This foundation course is designed for beginners who have never studied Japanese before. The Japanese phonetic system, writing system, basic greetings, sentence structures and practical vocabulary that are suitable for beginners will be introduced in this course. It also provides opportunities for students to understand the main aspects of Japanese culture and to develop the ability to communicate in basic Japanese, e.g., by introducing oneself, daily expressions, telling the time and the date and talking about one's daily life. Students' active participation in classroom activities is expected.

JAP2013 JAPANESE CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help students to obtain a real understanding of Japanese lifestyle and culture, as well as a good comprehension of values, behavioral patterns, and principles of Japanese people. In order to achieve this, the course provides a general introduction to Japanese geography, economy and religious beliefs, and includes relevant aspects of Japanese society, custom, etiquette, diet, education, and science. By the end of the course, students will have an overall view of Japan and its society and culture. Moreover, this course will build a foundation for future studies, careers, or tours in Japan, as well as profound research on Japanese history and culture.

KOR1013 KOREAN I

(3 units)

Pre-requisite(s): None

Course Description: This course is designed for students who have no prior knowledge of Korean language. The primary goal is to help novice learners of Korean language build basic communicative competence by developing their ability to construct language around topics of interest and apply Korean language to real-life situations. Students will learn Hangeul (Korean alphabet), and basic sentence structures needed to develop skills in Korean language learning. Students will learn proper oral and written use of the language, especially in consideration of Korean contexts and cultures.

KOR2013 KOREAN CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course is designed for students who have limited knowledge of Korean culture and society. The course will introduce and provide a broad exploration of Korean culture and society with visual and audio materials in order to facilitate students' appreciation of contemporary Korean society and culture through the instruction of both traditional and modern Korean issues through the lens of history, economics, language, food and domestic lifestyle. This course will provide students with the necessary exposure to appreciate various aspects of Korean culture. Students will be expected to engage with the course content through discussion, providing opinions on relevant topics and comparing them other culture. Through this course, students are encouraged to broaden their worldview on foreign cultures and to become knowledgeable members of the global community.

MAD1003 STUDIO ART PRACTICES: DRAWING FUNDAMENTALS

(3 units)

Pre-requisite(s): None

Course Description: This course is aimed at teaching drawing as a skill that can be applied across a wide variety of disciplines in the art and design field. The course focus will be on developing perceptual skills to produce drawings of merit from direct observation while gaining proficiency using the materials and tools of dry-media. Students will be taught the process of seeing, hand-eye coordination and the technical skills of handling the medium. In addition, the terminology of drawing will be introduced and utilized during discussions and critiques. Students will gain an understanding of how drawing fits into the Media Arts profession as a fundamental skill. Students will be expected to view their work critically through class critiques and discussions.

MAD1013 JAVASCRIPT FOR ART AND DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course introduces art and design students to computational knowledge and skills for creative expression. Through lectures and hands-on exercises, students will learn to visualise ideas using programming. They will work with JavaScript, HTML, CSS, and modern libraries and frameworks to apply computational thinking in the creation of interactive media. The course also covers key software engineering concepts and programming paradigms such as agile development, testing, functional and object-oriented programming.

MAD2003 DESIGN FUNDAMENTALS

(3 units)

Pre-requisite(s): None

Course Description: This course is aimed at introducing the conceptual, aesthetic and technical skills of design through experiential studio practice. The focus is on design principles and fundamentals as they apply to static media, time-based media, interactive media and relevant software.

MAD2013 ART MEDIA FUNDAMENTALS

(3 units)

Pre-requisite(s): None

Course Description: The technical aspects of various traditional media are introduced and practiced in this course through studio application. Within individual mediums, various techniques will be demonstrated and explained. Through the experience of viewing and creating art work in different mediums, students will be made aware of the intrinsic advantages and disadvantages of individual media on a technical and communicative level. Students will also gain an awareness of the inherent meaning certain mediums possess. Another defining goal of the course is to encourage the integration of traditional and digital media.

MAD2023 APPRECIATION OF THE ARTS

(3 units)

Pre-requisite(s): None

Course Description: The primary objective of this course is to expose students to a wide variety of visual art and design from multiple perspectives to build a comprehensive knowledge for lifelong learning. This includes but is not limited to cultural and historical perspectives and the various functions art and design has had and has as part of a universal human experience. By the end of the course students should be able to clearly define art by medium, origin in time and place and have an emerging ability to analyse a piece of art as well as distinguish the difference between types of artistic production. Students' pre-existing ideas of how art is defined should be challenged by being confronted with alternative viewpoints of various peoples, cultures and time eras. The institutions that surround the preservation, business and transmission of artistic and creative work will also be introduced with the idea of exposing students to art and design as a profession.

MAD2033 HISTORY OF MEDIA ARTS AND DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course is aimed at instilling in students a comprehensive knowledge of the history of the Media Arts as an influential force in human history. Students should gain an understanding how media and individual mediums have developed and evolved into their present form as a way to transmit information and communicate. This knowledge base should offer students a framework to place their own future practice in. As the Media Arts have always developed alongside technological developments, the history of related technology will be one focus of the course alongside the analysis of how information has been communicated and transmitted in terms of content, aesthetics and cultural geographies over time.

MAD2043 CONCEPT DEVELOPMENT FOR TIME-BASED MEDIA

(3 units)

Pre-requisite(s): None

Course Description: The course will explore the use of composition and frame, introduce directing methodologies, and explain editing principles and sound elements. Students will be required to create a number of methods for developing and communicating concepts in time-based media, such as creating treatments, make inspirational sketches, design characters and objects, and develop storyboards. By studying animation principles and techniques in contemporary fields of graphic design, students will explore terminology used in animation, including (but not limited to) cell and computer animation, stop-motion, and frame-by-frame animation. In addition, students will learn how to use a sequence of images to communicate their ideas or tell their stories. They will come to an understanding of how content meaning is created or changed when the structure or sequence changes, and how viewers respond emotionally. In the last instance, students will be able to create motion graphics for use on television or in online media. Students will be equipped with this knowledge in a series of lectures, readings, exercises, and projects and demonstrations. Evaluations of students will be based on in-class contribution and participation, ability to critique, develop concepts, and demonstrate proficiency with various media.

MAD3003 PHOTOGRAPHY

(3 units)

Pre-requisite(s): None

Course Description: The course in photography seeks to develop the keen understanding needed to read and understand photographic images. This is a key skill required by all artists. Students in this course will be exposed to the gamut of photographic tools ranging from the traditional to current imaging technologies available. Using the 35 mm single lens reflex (SLR) camera, and understanding manual exposure, lighting and film density is a major point of focus in this course. However, the concept of what “camera” is will be expanded by gaining familiarity with different imaging tools such as cell phones, scanners, digital cameras and even video cameras and their role in creating photographic images. The course will provide students with an in-depth overview of the history as well as contemporary practice of photography.

MAD3013 INTERACTIVE ARTS AND DESIGN

(3 units)

Pre-requisite(s): None

Course Description: By introducing programming skills and explaining the relationship between code and visual elements, this course aims to expand the visual literacy of students while simultaneously allowing them to apply creative ideas from static media to interactive media. A deep understanding of the general principles of programming and the design principles guiding interactivity are indispensable when harnessing the full potential of interactive media. The purpose of this course, however, is not to train students to become programmers. It will rather arm them with sufficient knowledge of dynamic media to enable them to develop and exploit these media in their creative endeavours. Students will learn how manipulation, creation, and transformation of visual elements are done through programming codes. In addition, they will explore and become familiar with the domain of generative visual arts and design by gaining an understanding of how concepts such as iterations, recursion, random function, and the L-system have evolved as concepts in computing. Upon completing the course, students should be able to develop visual applications in a range of creative and media productions.

MAD3023 DIGITAL IMAGING AND DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the fundamental practices in digital (computer) graphic design in both the art and design worlds through serial lectures, demonstrations, and workshops. Workshops, specifically, will focus on creating computer-generated images. A combination of theoretical and practical perspectives is adopted, and the course will address aesthetic as well as technical issues. Aesthetics will include issues such as composition, appreciation and the historical context, while technical topics will revolve around imaging (raster and vector), scanning, retouching, animated graphics, among others. Adopting the theoretical and practical perspective, the course is delivered by way of ensuring that students will experience digital graphics design in a very hands-on way. They will be exposed to discussions structured as seminars, and maximum participation of each student in critiquing and discussing the work of other students. For this reason, class attendance is not only regarded as mandatory, but participation in classroom discussions will be considered when

grades are calculated.

MAD3033 3D DESIGN FUNDAMENTALS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to give students a fundamental knowledge of three-dimensional (3D) design that applies across many disciplines. This includes an understanding of the basic elements and principles of 3D design, a working knowledge of the physical characteristics and inherent meaning of materials, the relationship between form and function, structural principles and an introduction to digital modelling technologies. Students will be introduced to a range of materials and be required to think of design as a process resulting in a product with functional goals and aesthetic concerns. Instruction on personal safety and environmental responsibility will be given in regards to each project.

MAD3043 DIGITAL DRAWING AND PAINTING

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to both the hardware and software that is used in digital painting. Students will use digital painting software in conjunction with a graphic drawing tablet and/or Cintq, a large capacitive screen where you can draw and paint directly on the display, to produce illustration and art. Entrepreneurial thinking will be encouraged, as New Media has created business models in which an illustrator or artist can produce, advertise, and distribute products through a variety of web-based platforms.

MAD3053 COLOUR CONCEPTS, THEORY AND PLANNING

(3 units)

Pre-requisite(s): MAD2043 CONCEPT DEVELOPMENT FOR TIME-BASED MEDIA

Course Description: This course is designed to give students an applied knowledge of the theoretical, natural, psychological, cultural and aesthetic meanings colour has across all media. In addition, students will be encouraged to think of colour as a perceptual and scientific phenomenon. Students will be exposed to colour perception as part of a holistic sensory experience, particularly audio-visual. The Munsell Colour System and 3D model/chart will be used to demonstrate and explain the nature of colour which is perceivable by humans.

MAD3063 ANIMATION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the history, language, principles, aesthetics and digital tools used in the creation of animation within the context of art and design. The class will focus on understanding the development of animation, the mechanism of animation, and the techniques of animation sufficient to produce projects of merit. Through different styles of animation, the class will explore the foundations of animation history and its characteristics. In addition, through the use of the software, this course will teach students how to complete basic digital animation.

MAD3073 LANGUAGE FOR AUDIO-VISUAL DESIGN

(3 units)

Pre-requisite(s): MAD2043 CONCEPT DEVELOPMENT FOR TIME-BASED MEDIA

Course Description: The main objective of this course is to enhance awareness of the aesthetic choices made in audio-visual media production and to explore how the tools and techniques used in its creation can be joined to generate a variety of meanings and messages. The course will involve practicing detailed analysis of the aesthetic choices made in different forms of audio-visual media, with broad emphasis given to a variety of audio-visual creations. Some practical exercises will also be given to deepen understanding of audio-visual design principles.

MAD3083 STUDIO ART PRACTICES: PAINTING FUNDAMENTALS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to give students an introduction to the medium. The materials and tools of painting, technical knowledge, formal issues and safety will be taught. Both water based and oil based paint will be introduced. The course focus will be on developing skills in handling the medium and painting from perception by direct observation of 3-dimensional forms in space.

MAD3093 WEB DESIGN AND HYPERMEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course aims to empower students with the ability to create and edit websites for both computer and mobile device applications. Students will approach design from the perspective of usability to create content in a non-linear format. Web content will be created using HTML4, HTML5 and CSS (cascading style sheets) 2 and 3 with Adobe Dreamweaver software. Students will learn the basics of HTML coding for a range of applications.

MAD3103 COMPUTER GAME DESIGN

(3 units)

Pre-requisite(s): None

Course Description: Like a number of courses in Media Arts and Design, this one is also based on skills, and intends to provide a strong foundation of computational concepts that can be found supporting user interfaces and games in different platforms. This will allow students to apply these techniques when developing new interfaces and games. Contemporary media, such as smartphones and tablets use these interfaces as the windows and face of intelligent games. As such, no matter how sophisticated and engaging visual interface and interaction becomes, they are still driven by intricate computational concepts and the meticulous application of those concepts. The course content takes students way beyond simple interfaces and will explore a number of input modalities (including webcams and microphones). Special topics will be introduced from time to time so that students can expand their skills in areas such as path-finding, cellular automata, and cellular and generic algorithms.

MAD3113 VIDEO ARTS

(3 units)

Pre-requisite(s): MAD2043 CONCEPT DEVELOPMENT FOR TIME-BASED MEDIA

Course Description: Video imaging as art forms the core focus of this course. Students will be given a grounding in several technical components such as image production, acquisition and digitization, as well as basic editing and final output. The experimental video art, especially in the latter half of the 20th Century will be discussed as far as its history, theoretical concept, aesthetics and criticism are concerned. Emphasis will be put on practical production of creative works in a studio environment.

MAD3123 GRAPHIC STORYTELLING

(3 units)

Pre-requisite(s): None

Course Description: This course seeks to focus the attention of students on the aesthetics of storytelling by emphasizing practical skills training and an investigation into the language of comic storytelling. By introducing theories of leading scholars and artists, and by examining recent developments in the local independent art movement, students will develop a critical framework enabling them to approach and understand comics with a new point-of-view. This understanding will further enable them to examine and enjoy both local and international works within specific socio-cultural contexts. Furthermore, students will come to an understanding of how abstract concepts and unrelated ideas can be transformed into cohesive messages before being delivered – creatively – to readers. They will consequently be required to research various drawing styles based on accepted storytelling methods. Students will also be exposed to practical training in the processes involved in creating the finished product from idea-germination stage. They will be encouraged to experiment with different styles before finding their own, unique, way of presentation in order to pursue a career in graphic storytelling.

MAD3133 DIGITAL SOUND PRODUCTION

(3 units)

Pre-requisite(s): None

Course Description: Students of this course will be introduced to the essence of digital sound production as it relates to vital aspects of sequential media. They will learn how to distinguish between the unique potential offered by sound media and its limitations, students will understand design fundamentals of discrete media as they relate to aural communication. Ideas will be created and developed in the practical component of this course. The course will provide students with hands-on skills in digital sound production by, inter alia, studying and understanding the aesthetic and theoretical studies of digital video and computer animation artworks. The use of sequential media in digital and computer environments will strengthen the students' multidisciplinary knowledge.

MAD3143 MEDIA ARTS AND DESIGN INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The aim of the internship is to provide real-world experience that enables students to put knowledge into action. An internship can help student deepen understanding of the organizational operation and gain relevant skills. Thus, the experiences can benefit to students who apply for further study or jobs in the future.

MAD3153 UX & UI DESIGN FOUNDATION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the foundational processes and techniques required for UX&UI Design. Following a user-centred design technique, students will be put more in touch with the users' true needs, thereby developing solutions that would work for the intended audience. The approach to UX Design in this course involves user data analysis, creating personas, understanding ideation, as well as building prototypes. For UI Design, this course will explore the entire workflow from information architecture development, wireframing, visual design and usability testing.

MAD3163 DESIGN WITH USERS: USER EXPERIENCE AND HUMAN FACTORS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to address the fundamental knowledge and skills in interaction design. Through series of lectures, students will be able to develop critical perspectives in usability and UX design and analytical skills for conducting user-centred research. Students will have the opportunity to practice these knowledge and skills via workshops and assignments that aim to design and develop digital interfaces.

MAD4003 FINAL YEAR PROJECT (MAD)

(3 units)

Pre-requisite(s): CTV2033 COMMUNICATION RESEARCH METHODS (for dissertation) or
MAD3073 LANGUAGE FOR AUDIO-VISUAL DESIGN (for media arts project)

Course Description: This course engages the student in supervised independent research or project work.

The course aims to: 1) Develop good media projects, scripts or dissertations under the guidance of a supervisor; 2) Ensure students possess the knowledge and skills required to complete a project independently, but with guidance; 3) Provide an opportunity to students working as a team to enhance their teamwork abilities. 4) Increase creativity and/or research skills by giving students more experience in the processes of creating a work of media arts project or dissertation.

MAD4013 STUDIO ART PRACTICES: EXPERIMENTAL MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course aims to give students an opportunity to experiment with a variety of 2D media in a creative and experimental manner. Painting, collage, printmaking, drawing and/or multimedia 2D media techniques will be introduced for further experimentation. Students will be expected to make a personal response to the media to create meaningful work by extracting meaning from materials, subject matter and mark making. Instruction on the use of tools and materials in regards to personal and environmental safety will also be a central theme.

MAD4023 COMPUTER PROGRAMMING FOR DESIGN

(3 units)

Pre-requisite(s): None

Course Description: Rather than teaching programming language, this course will focus on teaching students how to use a design method in a practical manner that is based on extant research. Students will understand how good computer programs can help them to channel their creativity in a way that may be programmed in widely-used computer programming languages. Students will learn how to decide what the program should do for them, by learning a set of techniques that will enable them to develop their programming requirements. They will also learn how to produce programs with consistent yet flexible structures, since improvements later will always be required. A key skill learned will be to build tests into the programming process in order to increase the reliability of programs.

MAD4033 NARRATIVE AND INTERACTIVITY IN MEDIA ARTS

(3 units)

Pre-requisite(s): None

Course Description: Students are expected to develop tools critically necessary to analyse contemporary media and its implementation in practice. They will be enabled to develop collaborative projects for both digital and non-digital media when exploring the complex relationship between narrative and interactivity. These projects will be executed in a workshop environment. Successful students will have expanded their understanding of narrative and will have refined their skills in critically analysing interactive formats. This will be done through projects, readings, and analysis.

MAD4043 PRINCIPLES OF PRODUCT DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course will produce students who come up with imaginative design proposals and creative solutions that may in turn be produced on either small or large scale. Students will attain knowledge in, and understanding of, the use of both common and new materials that can be used for designing new products or objects. It will provide students with an understanding of the basic processes and materials that are used when new products and objects are designed. They will be required to participate in different projects when developing their understanding of the intimate link between the right choice of materials and processes on the one hand, and the look and performance of products on the other. Students wishing to pursue 3-D related courses will in particular benefit from this subject.

MAD4053 DIGITAL IMAGE MANIPULATION

(3 units)

Pre-requisite(s): None

Course Description: This course seeks to provide students with a foundation in 2-D digital image processing. In doing so, the emphasis of this course will fall on techniques used in image processing, image filtering design, and the use of applications. Students will be exposed to the theories and methodologies underlying this discipline. Students will be constantly focussed on learning how to create and manipulate graphic and photographic artwork. They will learn how to interpret such artwork in a critical manner, and will also be exposed to these aspects regarding to how artists approach input and output of digital work.

MAD4063 VISUAL ARTS SINCE 1900

(3 units)

Pre-requisite(s): MAD2023 APPRECIATION OF THE ARTS

Course Description: The goal of this course is to provide students with criteria to make an educated and informed critical analysis of art from a cultural, historical, social and theoretical perspective. By learning about how art has developed along these lines, students will be enabled to view art as an ever changing entity.

MAD4073 SOCIAL DESIGN

(3 units)

Pre-requisite(s): None

Course Description: The role of the designer in society, and his/her belief that design can contribute to social change, is the main focus of this course. Taking part in lectures, participating in discussions, pursuing readings, attending presentations, and critiquing ideas and concepts will enable students to develop the tools, skills and overall awareness to pursue innovation while addressing various aspects of design and its role in society. They will develop the ability to reflect on their own processes when concentrating on research and its importance, reflecting on problem identification, considering the importance of audiences, and realizing the essential role of idea development. They will be exposed to topics such as transforming from publication to participation, decision-making, social design precepts, incentivized participation, gaming theories, choice optimization, transparency and flexibility, and shifting from stories to systems. As a case study-based course, this course will enable students to read, understand, ingest, and interpret case studies and to prepare written solution-driven analyses for in-class presentation.

MAD4083 SPECIAL TOPICS IN MEDIA ARTS AND DESIGN SUBJECT

(3 units)

Pre-requisite(s): None

Course Description: Different subjects are designed to give students a range of current ideas and respond to new interests of the faculty. Some topics include: Digital audiovisual, animation, video, interaction design, etc.

MAD4093 PHYSICAL COMPUTING ADVANCED INTERACTIVE MEDIA

(3 units)

Pre-requisite(s): MAD3013 INTERACTIVE ARTS AND DESIGN

Course Description: This course expands the students' knowledge of computational and interactive media with creative, practical applications of physical computing and rapid-prototyping technologies to interactive installation art, performing arts, wearable design, and kinetic sculpture. Exploring microcontrollers, such as Arduino for physical interaction, students will learn the fundamentals of electronics, robotics, and responsive interfaces. Over the course duration, students will develop projects using light, sound, motion, and other analog and digital inputs and outputs while synthesizing their expanded understanding of media art theory, embodiment aesthetics, and interaction design.

MAD4103 GAME ART AND 3D ANIMATION

(3 units)

Pre-requisite(s): MAD3033 3D DESIGN FUNDAMENTALS

Course Description: At the core of each video game, there is an intensely creative artistic vision and engaging, interactive visual elements that continuously expand the definition of game art. In this course, game art & animation focuses on the design of modular environments, texturing, 3D animations of characters and props that students learn to create in modeling and game development software and tools. The students acquire complex technical skills while developing their unique artistic vision through a progressive series of practical assignments while mastering the fundamentals of 3D animation, lighting, texturing, and rendering within industry-recognized game engines. In addition to learning effective technical workflows, the students will synthesize their understanding of the artistic principles at the core of 3D video games art, including 3D design, knowledge of color, lighting, shading, anatomy, motion, perspective, and polygonal modeling.

MAD4113 PRINCIPLES OF PRODUCT DESIGN AND EXHIBITION

(3 units)

Pre-requisite(s): None

Course Description: Combining art and technology, bringing together ideas and materials, and improving daily lives while protecting the health of society and creating new opportunities for industry is a creative discipline. This course will produce students who come up with imaginative design proposals and creative solutions that may in turn be produced on either small or large scale. Students will attain knowledge in, and understanding of, the use of both common and new materials that can be used for designing new products or objects. It will provide students with an understanding of the basic processes and materials that are used when new products and objects are designed. They will be required to participate in different projects when developing their understanding of the intimate link between the right choice of materials and processes on the one hand, and the look and performance of products on the other. Students wishing to pursue 3-D related courses will in particular benefit from this subject.

MAD4123 FINAL YEAR PROJECT (MAD)

(6 units)

Pre-requisite(s): CTV2033 COMMUNICATION RESEARCH METHODS (for dissertation) or
MAD3073 LANGUAGE FOR AUDIO-VISUAL DESIGN (for media arts project)

Course Description: This course engages the student in supervised independent research or project work. The course aims to: 1. develop good media arts projects or dissertations under the guidance of a supervisor; 2. ensure students possess the knowledge and skills required to complete a project independently, but with guidance; 3. provide an opportunity to students working as a team to enhance their teamwork abilities; 4. increase creativity and/or research skills by giving students more experience in the processes of creating a work of media arts project or dissertation.

MATH1003 LINEAR ALGEBRA

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the basic techniques in matrix algebra, which is the foundation for more advanced mathematics and statistics subjects. Major emphasis will be on the system of linear equations, linearly independence, and eigenvalue problems in finite dimensional vector spaces. Basic ideas and techniques on calculus will be introduced.

MATH1053 LINEAR ALGEBRA I

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the basic techniques in matrix algebra, which is the foundation for more advanced mathematics and statistics subjects. Major emphasis will be on the system of linear equations, linearly independence in finite dimensional vector spaces.

MATH1063 LINEAR ALGEBRA II

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I or
MATH1003 LINEAR ALGEBRA or
MATH1173 LINEAR ALGEBRA

Course Description: This course introduces the basic techniques in matrix algebra, which is the foundation for more advanced mathematics and statistics subjects. Major emphasis will be on the system of linear equations, linearly independence, and eigenvalue problems in finite dimensional vector spaces. Basic ideas and techniques on calculus will be introduced.

MATH1073 CALCULUS I

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the basic ideas and techniques in single variable calculus with mathematical rigour to prepare students for more advanced mathematical and statistical subjects.

MATH1083 CALCULUS II

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I or
MATH1103 CALCULUS or
MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

Course Description: This course is a continuation of Calculus I. It provides a solid foundation in multivariable calculus to prepare students for more advanced mathematics and statistical subjects.

MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

(3 units)

Pre-requisite(s): None

Course Description: Calculus for Science and Engineering introduces the differential and integral calculus for univariate functions. It emphasizes the basic ideas and concepts on limits, derivatives, antiderivatives, definite integral, simple differential equations and corresponding applications in natural science and engineering. It provides the foundations for more advanced quantitative courses for science and engineering student.

MATH1153 APPLIED LINEAR ALGEBRA AND LINEAR DYNAMICS

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA or
MATH1053 LINEAR ALGEBRA I, and
MATH 1063 LINEAR ALGEBRA II

Course Description: Applied Linear Algebra and Dynamics aims to provide some advanced topics and tools related to linear algebra. The course will equipped students with advantages for subsequent courses on data analysis and AI. It consists of orthogonal polynomials, least squares approximation, discrete Fourier analysis and fast Fourier transform, wavelet, positive definite matrices, singular value decomposition, minimum principles, and linear dynamics. It provides solid foundation for compression, optimization theory, principle component analysis, model based data analysis, Markov process and control.

MATH1163 ADVANCED CALCULUS

(3 units)

Pre-requisite(s): MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING or
MATH1073 CALCULUS I or
MATH1103 CALCULUS

Course Description: This course introduces the differential and integral calculus for multivariate functions. Advanced Calculus provides the basics of analytic geometry for lines and planes, curvatures for vector functions, partial derivatives, multiple integrals, infinite sequences and series, and second order differential equations. Advanced Calculus severs the foundations for many advanced courses and is usually a compulsory courses for most Programmes in top graduate schools.

MATH2003 DISCRETE STRUCTURES

(3 units)

Pre-requisite(s): None

Course Description: This course addresses a variety of fundamental topics in computer science, including propositional and predicate logic, proof technique, set theory, combinatorics, graph theory, and Boolean algebra.

MATH2013 INTRODUCTION TO MATHEMATICAL FINANCE

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I

Course Description: To introduce (1) the practical and theoretical concepts involved in computing interest; (2) sufficient knowledge to handle all normal interest computations including bonds and mortgages; and (3) the common practical methods of computing approximate interest rates for commercial transactions.

MATH2023 ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: This course introduces various forms of ordinary differential equations and their solution methods using both analytical and numerical techniques. It also provides students with Fourier series and its applications, and various forms of partial differential equations and their solutions, methods using both analytical and numerical techniques.

MATH2033 MATHEMATICAL STATISTICS

(3 units)

Pre-requisite(s): STAT2063 PROBABILITY THEORY or
STAT1013 INTRODUCTION TO PROBABILITY AND STATISTICS or
STAT1033 FOUNDATIONS OF PROBABILITY THEORY

Course Description: Randomness plays a crucial role in various models in financial mathematics. To handle the random elements in these models, statistics comes into play. For financial mathematics practitioners, a good understanding of the mathematics behind statistics is important. This course aims at introducing to students statistics from the mathematical point of view. The topics covered will find applications in other disciplines.

MATH2043 ORDINARY DIFFERENTIAL EQUATIONS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: This course introduces various forms of ordinary differential equations and their solution methods using analytical techniques. Topics include first order, second order and higher order scalar ODE, serious solution to second order linear ODE, systems of first order ODE, Laplace transform for initial value problems.

MATH2053 MATHEMATICAL ANALYSIS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course is a rigorous sequence in analysis on the line and higher dimensional Euclidean spaces. Limit, continuity, least upper bound axiom, open and closed sets, compactness, connectedness, differentiation, uniform convergence, and generalization to higher dimensions.

MATH2063 PROBABILITY AND STATISTICS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
ATH1083 CALCULUS II

Course Description: This course is to introduce basic concepts and theories of probability and statistics, some basic stochastic processes, martingales and their applications, and to create and formulate mathematical models using probability and statistics.

MATH3003 STOCHASTIC PROCESSES AND APPLICATIONS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II, and
STAT2023 ADVANCED PROBABILITY

Course Description: This course provides students with basic stochastic processes such as discrete-time and continuous-time Markov chains and semi-martingales including Brownian motion, Poisson process and Levy process. The course introduces Ito's formulas, martingale theory and its applications， stochastic differential equations, and stochastic integral with respect to semi-martingales, and helps students know how to apply stochastic

processes in option pricing.

MATH3013 DISCRETE MATHEMATICS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: This course aims to introduce basic ideas of discrete mathematics such as formal mathematical reasoning techniques, basic counting techniques and their applications for computer science students. The emphasis is on understanding the concepts and the ability to solve problems. The objective is for students to understand the basic theory and some applications of discrete mathematics. The course gives students training in the ability to think quantitatively and analyse problems critically.

MATH3033 PARTIAL DIFFERENTIAL EQUATIONS

(3 units)

Pre-requisite(s): MATH2043 ORDINARY DIFFERENTIAL EQUATIONS

Course Description: This course introduces the theory of multi-dimensional scalar and system of parabolic, elliptic and hyperbolic partial differential equations (PDEs) that model physical processes in areas such as physics, biology, chemistry and social science. Solution techniques such as the separation of variables, eigenfunction expansions, Green functions, Fourier and Laplace transforms for solving the equations in a bounded and unbounded domain, with homogeneous and inhomogeneous source term will be studied in detail.

MATH3043 REAL ANALYSIS (FOR MATH STUDENTS)

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course focuses on both theoretical aspects and problem solving. It will enable students to understand basic concepts on Lebesgue integration, LP spaces and provide the foundation for further studies in numerical analysis, functional analysis and advanced probability theory.

MATH3053 NUMERICAL METHODS I

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: This introductory course presents students some classical and commonly used numerical methods in various disciplines involving computing and numerical approximation and solution of equations. The course teaches students how to choose an appropriate numerical method for a particular problem and to understand the advantages and limitations of the chosen numerical scheme for a given mathematical problem so that results from the computation can be properly interpreted. The course also highlights important theoretical considerations on convergence and stability for numerical algorithm design.

MATH3063 MULTIVARIATE CALCULUS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and
MATH1063 LINEAR ALGEBRA II

Course Description: Students of this course will learn the theory of multivariable calculus and learn how to apply the theory to solve practical problems. This is a required course for Mathematics and Mathematics/Physics Majors, and is suitable for all students in Science, Engineering, Economics and Finance, and other students who will use multivariable calculus in their areas of study.

MATH3073 MULTIVARIATE ANALYSIS (FOR MATH STUDENTS)

(3 units)

Pre-requisite(s): GCNU1043 INTRODUCTION TO PROBABILITY AND STATISTICS, and
MATH1053 LINEAR ALGEBRA I, and
MATH1063 LINEAR ALGEBRA II

Course Description: To provide an understanding of the classical multivariate analysis and modern techniques in data mining. Observations in the social, life and natural sciences are multidimensional or very high dimensional. This kind of data sets can be analysed by techniques in multivariate analysis. With the help of statistical package, such as Matlab and R, students will learn how to treat real problems with multivariate data.

MATH3083 MARKOV CHAIN AND QUEUING THEORY

(3 units)

Pre-requisite(s): MATH 1053 LINEAR ALGEBRA I, and
MATH 1073 CALCULUS I, and
GCNU1043 INTRODUCTION TO PROBABILITY AND STATISTICS or
MATH2063 PROBABILITY AND STATISTICS

Course Description: To introduce fundamental theory, models, applications and algorithms of Markov Chain and Queuing Theory.

MATH3093 SUPPLY CHAIN MODELLING

(3 units)

Pre-requisite(s): OR3013 LINEAR PROGRAMMING AND INTEGER PROGRAMMING

Course Description: To provide students with an understanding of major areas in logistics and supply chain management as well as to illustrate how to apply various skills and techniques in logistics and supply chain management to analyse and solve various real problems. The emphasis will be on learning of various models and techniques in logistics.

MATH3143 DIFFERENTIAL GEOMETRY

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: This course provides students with the mathematical tools of classical differential geometry, fundamental topological invariances of curves and surfaces and the theory of intrinsic geometry of surfaces. Also trains them to apply techniques in shell theory and cartography.

MATH3153 ADVANCED PROBABILITY

(3 units)

Pre-requisite(s): MATH1003 LINEAR ALGEBRA or
MATH1053 LINEAR ALGEBRA I, and
MATH1073 CALCULUS I or
MATH1103 CALCULUS or
MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

Course Description: This course introduces basic concepts and

techniques of measuring theoretic probability. It introduces some some basic stochastic processes, martingales and their applications, and familiarises students with random variable and various probability distributions from the perspective of measuring theoretic probability theory.

MATH3163 REAL ANALYSIS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course provides an introduction to measure theory, Lebesgue integration, L^P space, and Fourier analysis. Equipped with this knowledge, students are prepared for further studies in numerical analysis, functional analysis and advanced probability theory.

MATH3173 APPLIED STOCHASTIC PROCESS

(3 units)

Pre-requisite(s): STAT1033 FOUNDATIONS OF PROBABILITY THEORY or
STAT2063 PROBABILITY THEORY or
MATH2063 PROBABILITY AND STATISTICS
or STAT2023 ADVANCED PROBABILITY,
and MATH1063 LINEAR ALGEBRA II,
and MATH1083 CALCULUS II

Course Description: 1. To introduce students to basic stochastic processes such as discrete-time and continuous-time Markov chains and semi-martingales including Brownian motion, Poisson process and Levy process. 2. To familiarise students with Ito's formulas, martingale theory and its applications, stochastic differential equations, and stochastic integral with respect to semi-martingales. 3. To apply stochastic processes in option pricing.

MATH3183 VECTOR CALCULUS AND COMPLEX ANALYSIS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: Vector Calculus and Complex Analysis play an important role in the development of many subjects in science, engineering, and Physics. In this course, students will be taught the fundamentals of vector calculus and complex analysis and their application to various kinds of practical problems.

MATH4003 GRAPH THEORY

(3 units)

Pre-requisite(s): None

Course Description: This course covers some fundamental concepts and principles of graph theory. Practical topics include the Chinese postman problem, the travelling salesman problem and the map colouring problems. Applications of the theory and some related algorithms are also discussed.

MATH4023 DIFFERENTIAL EQUATION

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and
MATH1063 LINEAR ALGEBRA II

Course Description: This course introduces differential equations and covers methods for solving these equations. The modelling of diverse phenomena by differential equations is demonstrated by a variety of examples.

MATH4033 COMPUTATIONAL FINANCE

(3 units)

Pre-requisite(s): STAT2003 ADVANCED STATISTICS or
MATH2063 PROBABILITY AND STATISTICS

Course Description: To introduce computational methods for problems in finance, including the computation of market indicators and option prices. The market indicators include stock and option indices. The option prices are based on the Black-Scholes model. Finite difference methods, Monte Carlo Methods and Binomial Tree Methods will be introduced.

MATH4043 ACTUARIAL MATHEMATICS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and STAT1033
FOUNDATIONS OF PROBABILITY THEORY
or STAT2023 ADVANCED PROBABILITY

Course Description: To introduce students to the mathematics of life contingencies and elementary actuarial functions such as present values of life annuities and life insurance. At the same time, the course aims to develop students' knowledge of the theoretical basis of certain actuarial models and the application of those models to insurance which includes formulating methods for determining the net level annual premium for insurance products. The relationship between various actuarial functions will also be explored.

MATH4053 NUMERICAL METHODS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and
STAT2043 STRUCTURED PROGRAMMING
(FOR STAT STUDENTS) or
COMP1023 FOUNDATIONS OF C
PROGRAMMING

Course Description: This course teaches the ideas underlying commonly used numerical methods. It highlights important considerations in coding algorithms so that they are efficient and reliable. It teaches students how to choose an appropriate numerical method for a particular problem and to interpret the resulting output.

MATH4063 CASE STUDIES IN MATHEMATICAL MODELLING

(3 units)

Pre-requisite(s): GCNU1003 SPEAKING OF STATISTICS or GCNU1043 INTRODUCTION TO PROBABILITY AND STATISTICS or GCNU1053 STATISTICS FOR SOCIAL SCIENCE or GCNU1063 BUSINESS STATISTICS or GFQR1003 A JOURNEY WITH DATA or GFQR1013 HANDS ON DATA ANALYTICS FOR EVERYONE or GFQR1023 DATA ANALYTICS FOR BUSINESS or GFQR1033 STATISTICS IN OUR DAILY LIFE, and MATH1073 CALCULUS I or MATH1103 CALULUS or MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

Course Description: This course teaches students how mathematics interfaces with other disciplines. Real-life problems are solved using models in statistics, mathematics, and physics. The case studies and problem-based approaches are adopted. Programming abilities are very crucial to this course.

MATH4083 NUMERICAL ANALYSIS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and MATH1083 CALCULUS II, and COMP3153 C++ PROGRAMMING LANGUAGE or COMP1023 FOUNDATIONS OF C PROGRAMMING

Course Description: This course introduces numerical methods on various problems, such as equation solutions, interpolations, differentiations and integrations, initial value problems, linear systems, and error analysis on these numerical methods. Students would learn the theory of numerical analysis, as well as its rich applications in science and economics. After studying this course students will have a better mastery of techniques in numerical analysis.

MATH4093 COMPLEX ANALYSIS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II

Course Description: This course introduces introduce the basic theory of analytic functions of one complex variable. The topics include some important theorems, like Cauchy's theorem, Residues theorem and series representation of analytical functions and conformal mappings and their applications.

MATH4103 MATHEMATICAL MODELLING

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I

Course Description: This course aims to let students apply mathematical and statistical skills to real world problems according to the basic principles of mathematical and statistical modelling and investigate meaningful and practical problems chosen from common experiences encompassing many academic disciplines, including mathematical sciences, engineering, operations research, management sciences, and life sciences. It can also enable students to use related computing software in mathematical modelling and problem solving and to formulate real world problems as mathematical models.

MATH4113 SELECTED TOPICS IN APPLIED ANALYSIS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and MATH1083 CALCULUS II

Course Description: This course aims to give students a broad training on various analytical techniques in modern applied mathematics. It intends to equip learners, through various teaching and learning activities and assessment methods, with skills and knowledge to solve more sophisticated mathematical problems in various areas.

MATH4123 FINAL YEAR PROJECT I (MATH)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing in Applied Mathematics Programme

Course Description: (1) To enable students to go through an independent learning experience. (2) To provide students with opportunities in developing skills, including the use of on-line and off-line materials, the logical development of scientific arguments, thesis writing skills, presentation techniques and time management. (3)To enable students to demonstrate an integrated understanding of mathematics through solving real-life problems.

MATH4143 FUNCTIONAL ANALYSIS

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and MATH3043 REAL ANALYSIS (FOR MATH STUDENTS) or MATH3163 REAL ANALYSIS

Course Description: This course aims at familiarizing the student with the basic concepts, principles and methods of functional analysis and its applications. The notions of metric spaces, fixed point theorems, Banach spaces, Hilbert spaces, continuous linear operator, the Hahn-Banach extension theorem, the uniform boundedness principle and the open mapping theorem, and applications of the above topics will be introduced.

MATH4153 NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS

(3 units)

Pre-requisite(s): MATH3053 NUMERICAL METHODS I or MATH4083 NUMERICAL ANALYSIS

Course Description: This course aims to apply numerical methods and scientific computing techniques for ordinary and partial differential equations. This course introduces the major numerical techniques for solving ordinary and partial differential equations. Emphasis is placed on finite difference methods. Methods for different classes of first and second order linear PDEs are described and analysed. It trains students to design computer programmes and apply them to solve differential equations.

MATH4163 FINAL YEAR PROJECT II (MATH)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing in Applied Mathematics Programme

Course Description: (1) To enable students to go through an independent learning experience. (2) To provide students with opportunities in developing skills, including the use of on-line and off-line materials, the logical development of scientific arguments, thesis writing skills, presentation techniques and time management. (3) To enable students to demonstrate an integrated understanding of mathematics through solving real-life problems.

MCOM1003 INTRODUCTION TO MEDIA STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims at giving students an orientation on the evolution of various media technology and how it shapes our socio-cultural life, and the ever-changing landscape of mass communication. The history is complimented by concrete cases on contemporary issues concerning the globalized mode of the production and consumption of media and media culture. By the end of the course, students will have a better understanding on how messages are conveyed through different media and the impacts on mediated communication when different technology is applied.

MCOM1013 NEW MEDIA, CULTURE AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course provides a critical survey of the field new media studies and communications. It begins with thinking about the individual as living in a fast-changing new media ecology; it then examines the political-economic and cultural aspects of new media as it develops in contemporary societies such as the U.S. and mainland China. The course will introduce students to some leading research as well as creative works on new media developments in order to explore the role of new media and media practices in modern life.

MCOM2003 INTRODUCTION TO MEDIA STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course explores both the practical and theoretical dimensions of media studies and introduces the discipline as a social process and as an academic field.

MCOM2013 COMMUNICATION THEORIES I

(3 units)

Pre-requisite(s): None

Course Description: A broad spectrum of theoretical development is explored encompassing mass communication theories on history, technology, and production. Application of the theories is an important component of the class, especially within the context of media industry in Chinese society in order to provide a theoretical framework to meet the dynamic changes in the discipline of communication.

MCOM2023 COMMUNICATION THEORIES II

(3 units)

Pre-requisite(s): MCOM1003 INTRODUCTION TO MEDIA STUDIES or
MCOM1013 NEW MEDIA, CULTURE AND SOCIETY or
MCOM2013 COMMUNICATION THEORIES I

Course Description: A second part of communication theories is explored on discourse, representation, and audience. Application of the theories is an important component of the class, especially within the context of media industry in Chinese society in order to provide a theoretical framework to meet the dynamic changes in the discipline of communication.

MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the techniques of basic news and feature writing, develops students' abilities to read foreign news outlets regularly and work with professional sources.

MCOM2043 DOCUMENTARY FILM CLASSICS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with the knowledge involved in analysing documentary films. Through lectures, discussions, and projects, students will learn the skill required in evaluating non-fiction storytelling, filming, and editing sound and images.

MCOM2053 REPORTING LABORATORY (1)

(3 units)

Pre-requisite(s): MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

Course Description: In this course, students learn to produce reporting work for the student newspaper/ magazine. Under supervision, each student is required to work as reporter and later editors in two consecutive semesters.

MCOM2063 FOUNDATION OF PHOTOJOURNALISM

(3 units)

Pre-requisite(s): None

Course Description: To enhance student's awareness of the possibility as well as the limitation of images in news reporting, and to develop their ability in producing visual report of news events independently. In response to the digital technology that has become widely used in today's news business, this course will equip students with basic knowledge in handling, transmitting and preserving the quality of image files captured by digital devices.

MCOM2073 HISTORY OF EAST ASIAN MEDIA AND CULTURE

(3 units)

Pre-requisite(s): None

Course Description: This course examines the history of the cultural production, circulation and consumption in East Asia in which the textures of mentality and experiences are constructed into popular narratives which recur and are re-contextualized in global

cultural industry. With a focus on the interlocked relationship between textuality and historical conditions, students are expected to explore how the historical relations of East Asian capitalistic-socialization process, given by global political economy, has been co-evolving with the generative and circulation processes of various themes, motifs and subjects, explicitly or implicitly, embedded in the cultural texts such as literary works and film. The primary goal of this course is to provide students with a phenomenological angle to look at the formative process of heterogenous textures in global configuration and to consider the homogenous logic of various cultural formations in the present transnational circuit in East Asia.

MCOM2083 MULTIMEDIA PRODUCTION I

(3 units)

Pre-requisite(s): MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

Course Description: This course equips students with the basic knowledge and skills involved in the gathering, writing, and producing a range of audio-visual products. Through lectures, discussions, and practical hands-on work, students will learn and apply the techniques presented in creating compelling and accurate multimedia content. This includes techniques in creating educational, non-fiction, and journalistic content for audio (podcasts), video (news packages), and social media. Students will also have a basic understanding on factors affecting the efficiency of digital communication processes.

MCOM2093 POPULAR CULTURE AND JOURNALISM

(3 units)

Pre-requisite(s): None

Course Description: This course examines representations of journalists and journalism in the popular culture, focusing on TV and film. The secondary emphasis will be on the influences on different types of journalism (i.e. investigative reporting, war reporting, political journalism), different issues in journalism (i.e. objectivity, ethics, Fourth Estate role, sensationalism, commercialism, whistleblowing), and how gender, sexuality, nationality, and ethnicity inform journalistic practice.

MCOM2103 ENTERTAINMENT JOURNALISM

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with the skills necessary to create a wide variety of media content relating to the entertainment industry in the convergent media era. The background of the entertainment industry, including its history and development, and ethical and legal concerns will be outlined. The students will then create a variety of content, including media reviews, interviews with media professionals, feature articles, and a short multimedia video. This will be capped off in a group project where students have to design and app or website in which to present the media content they have created during the rest of the class.

MCOM2113 INTERNATIONAL ORGANIZATIONS REPORTING

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to prepare students to report on internationals news with a focus on international organizations. Four types of international organizations will be covered, namely the UN, the UN affiliated organizations, financial and monetary organizations and quasi-governmental organization. Familiarise students with how international organizations are structured and what should be taken note of when reporting on their activities. Different types of international organizations will be covered.

MCOM3003 MEDIA IN CHINA

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to Chinese media development which takes students through a contemporary history and structure of the Chinese media system and cultural issues. Topics include journalism, advertising industry, TV and cinema culture, Internet regulation, and the changing nature of Chinese media within the context of globalization.

MCOM3023 REPORTING LABORATORY (2)

(3 units)

Pre-requisite(s): MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

Course Description: Students learn to produce experimental work for the student newspaper/ magazine under supervision. In this course, students are expected to shift their roles from reporters to editors.

MCOM3033 INTERNSHIP (MCOM)

(3 units)

Pre-requisite(s): None

Course Description: MCOM students are required to undertake an internship. The internship is normally of at least six weeks full-time employment or professional practice during the summer between the third and fourth year. Students are required to conform to all reasonable requirements of their internship employer. Each student will be asked to write a reflection of no less than 1000 words after the internship.

MCOM3043 CULTURE, MEDIA AND TOURISM

(3 units)

Pre-requisite(s): None

Course Description: This course examines the role that tourism plays in contemporary society. Emphasis will be given to the influences that media has on tourism practices, including photography, the tourist gaze, marketing, impact on locals, issues concerning authenticity, and the influence of media.

MCOM3053 SEMINAR IN CULTURAL THEORIES AND GLOBALISATION

(3 units)

Pre-requisite(s): None

Course Description: The main goal of this seminar course is to serve Y4 students in preparation for Final Year Project to situate their research concern in a theoretical coordinate. This reading course will offer students the opportunity to critically interpret the history, applications and limitations of several theoretical and methodological approaches to the study of contemporary global culture and to construct a theoretical framework for their research

projects.

MCOM3063 SOCIAL MEDIA ANALYTICS

(3 units)

Pre-requisite(s): None

Course Description: Social media has permeated the daily lives of many people. This has brought new opportunities as well as challenges to media and communication studies. Many tools are now available for social media analytics, among them is Python as one of the most popular programming languages for data analytics. Upon completion of the course, the students will have acquired basic skills in using Python programming language to mine social media data for digital media studies and research. In addition, it has become more important for journalists to be equipped with data skills so that they can explore new forms of journalism. Skills learned in this course on data visualisation can also be applied to data journalism and other research skills for media content production.

MCOM3073 RISK, CRISIS, AND COMMUNICATION

(3 units)

Pre-requisite(s): None

Course Description: This course examines a) the aims, scope and development of the fields of risk and crisis communication, b) approaches to studying risk and crisis communication processes and effects, and c) strategies and challenges for communicating risks and crises. This course offers a comprehensive overview of the fields, including fundamental concepts, important theoretical perspectives, numerous previous studies, and a wide variety of topics and cases. Overall, this course addresses the psychological, behavioural, social and political implications regarding the communications of risk and crisis events. By the end of this course, students will have a more in-depth understanding about the roles of media and communication in the risk society and in times of crisis. Students will also develop critical thinking skills to evaluate and analyse assorted risk and crisis communications in real life.

MCOM3093 MEDIA RESEARCH METHODS

(3 units)

Pre-requisite(s): MCOM2013 COMMUNICATION THEORIES I
or
MCOM2023 COMMUNICATION THEORIES II

Course Description: In this course students will become conversant in carrying out various kinds of research used in journalism, media studies, and media management. Students will learn how to sharpen their critical appraisal of these research methods and results used by journalists. The class will present examples and apply best practices in the field, as well as analyses of the processes and players in journalism using these various methods.

MCOM3103 MULTIMEDIA PRODUCTION II

(3 units)

Pre-requisite(s): MCOM2083 MULTIMEDIA PRODUCTION I

Course Description: This course aims to further equip students with the knowledge and skills involved in producing a short documentary film. Through lectures, discussions, and practical hands-on sessions and projects, students will continue to learn and refine the application of the techniques required in non-fiction storytelling, filming, and editing sound and images. This is a practical course toward developing a 10-15-minute documentary FYP and other advanced media content production.

MCOM3113 MULTIMEDIA PRODUCTION III

(3 units)

Pre-requisite(s): None

Course Description: This course aims to further equip students with the knowledge and skills involved in producing a short documentary film. Through lectures, discussions, and practical hands-on sessions and projects, students will continue to learn and refine the application of the techniques required in non-fiction storytelling, filming, and editing sound and images. This is a practical course toward developing a 20-minute documentary FYP.

MCOM3123 INTERNATIONAL COMMUNICATION

(4 units)

Pre-requisite(s): MCOM1003 INTRODUCTION TO MEDIA STUDIES or
MCOM1013 NEW MEDIA, CULTURE AND SOCIETY

Course Description: This course is an introduction to International Communication as both histories and the restructuring order in political economy and culture in the contemporary world. We will trace major changes since the Cold War period when communications have come to constitute one most dynamic industry and the concept of "nation" has been increasingly questioned as a fruitful framework to understand the globalization of communication.

MCOM3133 MEDIA LAW AND ETHICS

(3 units)

Pre-requisite(s): None

Course Description: This course delves into the legal issues confronting journalists and media professionals. Students will become familiar with these issues, as well as learn the history of cases involving such issues, and how professionals have addressed these issues in practice. By studying the law and ethics, students will develop an understanding and a toolkit needed to address such issues in their academic study and professional practice. Principles will be considered in light of practical examples from a wide variety of media and circumstances. Given this, critical and analytical thinking will be emphasised in this course, although some basic memorisation is also required.

MCOM3143 ADVANCED REPORTING AND WRITING

(3 units)

Pre-requisite(s): MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

Course Description: This course introduces some of the most important theories and techniques of advanced news reporting. This course enables students to understand these basic theories and techniques by applying them in journalistic practice. Doing so is crucial to ensure that students will succeed in journalism, or any other field based on research-based writing.

MCOM3163 STUDY ON INTERCULTURAL COMMUNICATION ISSUES

(3 units)

Pre-requisite(s): None

Course Description: This course serves as an introduction to the field of intercultural communication by looking at the practical application of theory and research, particularly in acknowledging the influence of context and power in intercultural interactions. It identifies the key intercultural communication challenges both at home and abroad and how those challenges affect people, their jobs, and their relationships. It focuses on the strategies and skills needed to deal effectively with these challenges in a broad variety of interaction contexts.

MCOM3173 GENDER, IDENTITY AND THE MEDIA

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to help students to be informed consumers of media, to examine gender and diversity portrayals in the various media, and to explore how the media industry and culture treats gender and identity. These objectives will result in a raised awareness of how both sexes can participate equally in the world around them.

MCOM3193 JOURNALISM AND TRUTH

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to a variety of journalistic epistemologies, including their theoretical and practical aspects. The course emphasizes not only practice with these epistemologies, but also a theoretical understanding of how these epistemologies have evolved. How they impact journalism regarding writing, publication, distribution, and consumption will be covered as well.

MCOM3203 THE LANGUAGE OF JOURNALISM

(3 units)

Pre-requisite(s): None

Course Description: This course emphasizes the language use of contemporary journalism from a critical linguistic perspective. Students will learn basic and intermediate linguistic concepts and analytic tools. They will then learn how to apply these tools to analyse a variety of news texts, both written and visual. This will emphasize both a greater understanding of language use in production of the student's own news texts and a critical understanding of the language use of other news texts.

MCOM3223 INTERNATIONAL NEWS

(3 units)

Pre-requisite(s): None

Course Description: Students will be acquainted with international news in terms of both its content and the processes by which it is produced in order to engender an appreciation of the special problems and situations of this type of news as compared with domestic news. Reading, audio-visual materials and visits will provide knowledge and experience about foreign correspondence and the people and organisations that carry it out. Students will be encouraged to critically appraise the international news they receive on a daily basis and suggest ways to appreciate it better and to improve it.

MCOM3253 THEORY AND PRACTICE OF ONLINE VIDEO

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the most up-to-date media theories, turns, and trends in the academic studies of online video from its cultures, media practices, to aesthetics and affects. It is also situated in a broader media history and academic lineage in studying theatre, television, and cinema as well as the technical intricacies from infrastructure, software, interface, and platform. In addition to learning media theories, students are expected to gain practical knowledge on the production and consumption of the medium in China and globally. Today it is common for students to learn from online videos on a variety of subjects from how to bake to how to code. In applying this already ubiquitous cultural logic of learning, online video is both the subject and method of this course, as students will learn by analyzing videos, applying theories, producing video essays of their own to practice both the techniques and media theories, in order to highlight issues in their specific socio-technical contexts.

MCOM3263 CHINESE NEWS AND FEATURE WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the principles and techniques of gathering, selecting and presenting information in a style appropriate to online and print journalism in Chinese. Emphasis is put on stimulating the students' interest in social events around them. The course prepares students for more advanced forms of journalism for the FYP projects and News Competition in Chinese as well building a portfolio in Chinese for internships. Reference is made to the local context in the discussion of the news language.

MCOM4003 ADVANCED TOPICS IN MEDIA STUDIES

(3 units)

Pre-requisite(s): MCOM2013 COMMUNICATION THEORIES I
or
MCOM2023 COMMUNICATION THEORIES II

Course Description: The course is an introduction to critical studies of media culture. As an advanced course in the final year, it builds on the theoretical foundation and empirical purview prepared by Introduction to Media Studies, Media in China, and also ME courses offered during Y3. By surveying major problematics in classical cultural theories and discussing contemporary issues, it aims at offering theoretical frameworks for students in understanding media and media culture critically.

MCOM4013 CONVERGENT JOURNALISM

(3 units)

Pre-requisite(s): MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

Course Description: Introduce students to a variety of journalism practices involving new media, wired and wireless communication technologies at both the applied and the theoretical level. There is a particular focus on journalism, multimedia and the Internet. Students will learn how to make the best use of the latest communication tools to create compelling and accurate journalism

content as well as anticipate future trends and issues. Lab sessions are incorporated into the course to give students hands-on experience.

MCOM4023 EDITING LABORATORY

(3 units)

Pre-requisite(s): None

Course Description: In this course, students work on the editing of multimedia productions in a collaborative fashion. The course provides continuing opportunities for students to develop their professional skills and knowledge of magazine production.

MCOM4033 FINAL YEAR PROJECT (MCOM)

(3 units)

Pre-requisite(s): JOUR3053 MASS MEDIA RESEARCH METHODS

Course Description: In this course students integrate theory and practice by either producing a substantial piece of individually produced in-depth report (in the form of a feature story or a 20-minute documentary); or an academic dissertation. In either case the Final Year Project is a means of engaging the student in a piece of independent research that provides an analytical and critical evaluation of an idea. The course tests research and professional skills as well as the ability to apply theoretical insights.

MCOM4053 ANALYSIS OF MEDIA CONTENT AND MEDIA FRAMES

(3 units)

Pre-requisite(s): None

Course Description: This course aims at providing students with: (1) Knowledge of theory and logic of both systematic quantitative content analysis and systematic qualitative content analysis procedures; (2) Understanding: students reflect the underlying epistemological problems. Also the study of classic content analysis helps both understand this method better and inspire applications in our own research; (3) Practice: Students carry out the different steps in both types of content analysis, so they are able to carry out content analysis research and to become familiar with procedures as well as common problems in setting up and carrying out content analysis; (4) Evaluation: Understand how to critically evaluate and improve content analysis methods used in previous studies; (5) Facilitating: For Bachelor thesis writing.

MCOM4063 BUSINESS AND FINANCIAL REPORTING

(3 units)

Pre-requisite(s): None

Course Description: The aim of the course is to prepare students to report on economic events and provide a global perspective of economics and finance. It aims to prepare them to work on the business desk and understand the main concepts and themes of the news which these desks will cover.

MCOM4073 FINAL YEAR PROJECT (MCOM)

(6 units)

Pre-requisite(s): MCOM3093 MEDIA RESEARCH METHODS

Course Description: This is a capstone project which allows year-four students to assimilate and apply learned skills in a single project. This allows students to work on a long-form, independently developed project to “go deep” into the work. The project can take the form of a feature article, a short documentary, or an academic dissertation.

MCOM4083 ADVANCED AUDIO PRODUCTION

(3 units)

Pre-requisite(s): None

Course Description: This course will prepare students for audio news and storytelling. Students will learn how to develop story ideas, research and do pre-production planning, conduct audio interviews, record and use natural sound, write audio scripts for impactful storytelling, identify suitable music and do advanced recording and editing of audio content. In this hands-on practical course students will collaborate to produce two episodes of 30-minute podcasts.

MCOM4093 TECHNOCULTURE

(3 units)

Pre-requisite(s): None

Course Description: This module aims to provide students with an understanding of the intricate relationship between technology, culture and literature. Beginning the industrial revolution, it will critically trace the major theories and texts of this genre, including but not limited to Science Fiction, and give students a solid understanding of how technology is increasingly becoming a second nature to human lives.

MCOM4103 AI AND JOURNALISM

(3 units)

Pre-requisite(s): MCOM2033 FOUNDATIONS OF NEWS AND FEATURE REPORTING

Course Description: This course aims to prepare students for the emerging landscape of news media, shaped significantly by advancements in artificial intelligence (AI). The course seeks to provide students with a comprehensive understanding of how AI technologies are transforming traditional journalism practices and the potential implications for the future of the industry. The primary objective of this course is to familiarize students with AI technologies and their applications in journalism, such as automated content generation, data journalism, audience analytics, and personalized content delivery. It will also aim to equip students with the necessary skills to utilize AI tools effectively and ethically in their journalistic practices.

MHR3003 HUMAN RESOURCE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to prepare students for a successful business career as a human resource professional by providing them with a broad understanding of issues and principles in human resource management in various organisational settings.

MHR3013 HUMAN RESOURCE DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide a comprehensive overview of the research, theory and practices of training and development within an organisation, and to prepare students as a potential practitioner in a managerial role or as a specialist working within an organisation, or as an external consultant working with a

range of organisations with training and development needs.

MHR3023 RECRUITMENT AND SELECTION

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to various theories and concepts associated with the effective staffing of organisations. Strategic, technological, practical, ethical and legal issues confronting organisations' staffing systems are presented. After completing this course, students are expected to have acquired the background for understanding contemporary recruitment and selection issues and the competencies to address specific staffing challenges.

MHR3033 PERFORMANCE MANAGEMENT AND REWARDS

(3 units)

Pre-requisite(s): MHR3003 HUMAN RESOURCE MANAGEMENT

Course Description: This course is designed to provide a framework of concepts and knowledge for understanding the course and to introduce students to recent developments in performance management. Students will learn to analyse approaches to managing performance; identify the major actors, their roles and the current issues in performance management; and assess different strategies and processes used in managing the performance management process. Students will learn to apply relevant concepts and skills through case studies and role plays.

MHR3043 LABOUR RELATIONS AND LAW

(3 units)

Pre-requisite(s): MHR3003 HUMAN RESOURCE MANAGEMENT

Course Description: This course is designed to achieve two distinct objectives. The first is to provide a framework of concepts and knowledge for understanding the course and to introduce students to recent developments in labour relations. Students will learn to analyse approaches to industrial or employee relations; identify the major actors, their roles and the current issues in industrial relations; and assess different strategies and processes used in managing industrial relations. The second objective is to introduce students to the basic employment law principles. Students will learn to apply relevant employment law principles through case studies.

MHR3063 GLOBAL HUMAN RESOURCE MANAGEMENT

(3 units)

Pre-requisite(s): MHR3003 HUMAN RESOURCE MANAGEMENT

Course Description: The course introduces students to the general topic of global HRM in terms of environmental and organisational contexts, strategy structure and process. Next, students are introduced to HR and organisation from a comparative perspective, managing an international staff and focuses on international recruitment and selection, and performance management in an international context. After that, students are introduced to the notions of training and development of an international staff followed by issues of global compensation. Repatriation issues are discussed in terms of employee development. The course then directs its attention to issues of industrial relations and industrial democracy. The course ends with a discussion of issues, challenges and theoretical developments in global HRM.

MHR3073 APPLIED SOCIAL PSYCHOLOGY IN ORGANISATIONS

(3 units)

Pre-requisite(s): BUS2003 ORGANISATIONAL BEHAVIOUR

Course Description: This course is designed to introduce students to social psychology in organisations. Students will learn about how people think about, influence, and relate to one another within an organisational context. In particular, students will examine the impact of person, situation, and cognition on behaviour.

MHR3083 PREDICTIVE HUMAN RESOURCE ANALYTICS

(3 units)

Pre-requisite(s): MHR3003 HUMAN RESOURCE MANAGEMENT

Course Description: This course aims to introduce students to the field of Human Resource Analytics (HRA), which has experienced tremendous growth in recent years. The design of this course is of twofold. The first part consists of lectures covering the basic topics about the field of HRA. Subsequently, the second half will engage students in statistical analysis with HR-related data, illustrating how organizations use HRA to aid human resource decision making. After completing this course, students will have an understanding of this fast emerging field and the associated challenges and opportunities.

MHR4003 HUMAN RESOURCE STRATEGY AND PLANNING

(3 units)

Pre-requisite(s): MHR3003 HUMAN RESOURCE MANAGEMENT

Course Description: This course is designed to consider the theories and role of human resource planning and link it to the policies and practice required for effective human resource 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 resource information system and the use of information technology in HRM and employee planning are also key issues to study in the course.

MHR4013 HUMAN RESOURCE MANAGEMENT IN CHINA

(3 units)

Pre-requisite(s): MHR3003 HUMAN RESOURCE MANAGEMENT

Course Description: This course offers an advanced study of human resources policies and problems in Mainland China. The aims of this course are (1) to introduce to students the current and practical issues of doing HRM in Mainland China, (2) to enable students to understand and analyse the contextual forces of the labour market, characteristics of workforce and prevailing HRM functions and policies in China and develop them to evaluate and apply those learned skills and principles in managing human resources in China.

MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is to introduce students to the essential concepts of marketing and their application in contemporary dynamic business environment. This course aims at helping students to develop an awareness of and the sensitivity to the marketing activities on one's daily life as consumers. This course also helps student to understand the marketing management functions of planning, organisation and control and develop skills to make optional marketing decisions.

MKT2013 SERVICE LEARNING AND COMMUNITY ENGAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Other Condition(s): Students must have at least year 3 standing

Course Description: This course provides students with an opportunity for active learning and enables them to build a sense of social responsibility and commitment that are essential when they apply their business and professional skills to their careers. This is a community-based instruction course intended to promote students' civic responsibility and to strengthen their problem-solving and decision making skills by acquiring hands-on experience in community projects provided by NGOs and not-for-profit organisations in Hong Kong, Mainland China and other countries. It is a reciprocally beneficial course, with meaningful service being provided to the community and meaningful learning experiences being provided to the student.

MKT2023 DIGITAL MARKETING STRATEGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with the knowledge of the fundamental and critical impacts of Internet and how it changes traditional marketing. Prevailing techniques in understanding digital marketing opportunities, challenges, and strategies and design of digital marketing plan will be included.

MKT3003 CUSTOMER RELATIONSHIP MANAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course introduces students to the theories and practices of customer relationships management. Students are learned how to translate the Customer Relationship Management (CRM) business strategy into marketing and how to build analytical CRM and enable organisational processes. Emphasis is placed on customer profiling, buyer motivation, customer communications, customer service centre operations, customer databases, different CRM strategies, and the role of measuring and managing customer satisfaction and loyalty.

MKT3013 GLOBAL MARKETING

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: Global marketing addresses global issues that challenge today's international marketer and describes the concepts relevant to all international marketers regardless of the extent of their international involvement. This course aims at students to keep pace with the changes facing businesses now and into the future. As global economic growth occurs, understanding marketing in all cultures is increasingly important. Progress toward the single market in Europe has continued, the former communist countries have continued to embrace free markets, a number of symptoms including major declines in currency values and wide spread bankruptcy of highly leveraged firms that had taken on an enormous burden of dollar debt to finance of dubious expansion projects. These are not simply news reports but changes that affect the practice of business worldwide.

MKT3023 MARKETING RESEARCH

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT, and
BUS3023 BUSINESS RESEARCH METHODS

Course Description: This course introduces students to the theories and practices of marketing research. This course covers: (1) the role, importance and limitations of marketing research; (2) basic procedures of marketing research; (3) various research techniques commonly used in marketing research; (4) applications of marketing research.

MKT3033 CONSUMER BEHAVIOUR

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: The purpose of this course is to study the overall consumer decision-making process. Consumer decision pattern determines the formulation of marketing strategy. Students are able to develop consumer behaviour preference marketing tactic to enhance marketing mix functions. Major areas covered are: the consumer as an individual, consumers in their social and cultural settings, the consumer's decision-making process and developing relevant and effective marketing strategies for consumers.

MKT3043 BRAND MANAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course focuses on providing students with the knowledge and experience of brand building and management. On successful completion of this course, students should understand the nature and importance of branding building in marketing practice. In addition, they should also possess the strategic thinking and techniques in developing and managing brands that enhance an organisation's marketing competence.

MKT3053 MARKETING INTERNSHIP

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course aims to provide students an opportunity to gain real-life working experience related to the various issues and activities associated with an organisation's marketing function. Under the guidance of both faculty and workplace supervisors, students will work in an organisation as interns and complete work assignments that are primarily related to

the organisation's marketing activities. The internship assignment is expected to take up no less than 120 hours to complete, and it may or may not be paid.

MKT3063 RESPONSIBLE MARKETING

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course has the following aims: (1) to examine the impact of Internet on planning of marketing strategies and practices; (2) to develop a general framework to enable the design of internet marketing programmes; (3) to introduce the concepts of ethical marketing and socially responsible marketing decision for today's organisations; (4) to design a marketing strategy that put corporate social responsibility first and utilise it to improve competitiveness and achieve long term sustainability; (5) to make use of internet to fulfil and perform corporate social responsibility that expected by stakeholders.

MKT3073 MARKETING COMMUNICATIONS

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course aims to equip students with the necessary knowledge, skills and independence of thought so that they can appreciate the role of marking communication within its broader context, and critically evaluate marketing communication theories and models before applying them to practical marketing situations.

MKT3083 DIGITAL MARKETING ANALYTICS

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: The marketing and communication landscape has changed dramatically in the past years. Recent development of social media, such as social networking sites, has resulted in creation of large volumes of structured and unstructured data. This course provides students with a solid understanding of the principles, methods, and technologies for digital marketing analytics. It places special emphasis on working through applications and examples of analytics in the real world, while offering an accessible overview on some of the fundamental techniques in digital marketing analytics. Particularly, this course uses analysis to craft experiences that profoundly reflect each online user's needs, expectations, and behaviors, measures real social media ROI (sales, leads, and customer satisfaction), leverages online data way beyond PR and marketing, implements advanced tools, processes, and algorithms for accurately measuring influence, and enables students to identify and understand most important audiences across the digital ecosystem.

MKT3093 LUXURY AND FASHION DIGITAL MARKETING

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course introduces students to the evolution of the fashion industry, fashion media consumption, and fashion consumer behaviors as a result of digital disruption, and the importance of digital marketing to fashion brands and products. Students will also learn about various common techniques and strategies in fashion digital marketing, and how to measure the impact of these strategies.

MKT3103 DIGITAL CONTENT PRODUCTION AND MANAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course will provide students with an opportunity to learn in great detail about practices of digital media content production and management. This course aims to accomplish three objectives. First, to develop students' ability to generate creative digital contents for marketing purposes. Second, to equip students with knowledge in evaluating the performance and improving the quality of such contents. Third, to develop skills in managing the technical and social aspects of such creative processes for a successful end result. Through discussions with and lectures by instructors, studio executives, producers, publicity and advertising specialists, students will further appreciate the need for a diversity of expertise needed to complete a digital content project or product successfully.

MKT4003 MARKETING STRATEGY

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course focuses on providing students with the knowledge and experience of planning and executing marketing strategy. Marketing strategy is part of the overall strategic management planning process with a specific mission on delivering value to customers. This course balances theories and practices. Apart from lectures and tutorials, it also utilises other means, such as case studies, guest talks, to enhance students' critical thinking abilities, problem solving capabilities and effective communication skills. To familiarise students with current marketing situation, marketing issues in Hong Kong and China are examined.

MKT4013 SERVICES MARKETING

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course will introduce the core principles, concepts and marketing strategies specific to the services sector. An overview of the services marketing process and its differences from the marketing of customer products will be presented. Topics will include quality control, customer satisfaction and customer loyalty in a variety of service industries.

MKT4023 MARKETING MANAGEMENT IN CHINA

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course aims at providing students with marketing management theories and skills, particularly an understanding of the marketing environment, marketing mix and practices in China. Emphasis will be placed on combining marketing concepts with practical business requirements in China

business. The current developments, problems and issues of doing marketing in China will also be examined.

MKT4033 RETAIL MANAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: This course aims at providing students with the understanding of the critical role that retailing plays in the business world and how retailing can be coordinated with the other marketing mix elements to further enhance the marketing functions. Both the current retailing practices and the general retailing theories are described in order to provide students with the necessary insight to operate a retail establishment successfully.

MKT4043 SALES MANAGEMENT

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: Effective management of a company's sales force is essential to the successful implementation of its overall marketing plan. This course provides students with overall understanding of the roles of sales management in a corporation and the theories as well as the empirical practices in managing a sales force effectively. The course also aims to study the sales management process from personal selling point of view and managerial point of view. This course will cover three main areas in Sales Management (1) the nature and scope of sales management in part I, IV; (2) the essence of the selling process in Part II and III; and (3) sales promotion and sales channel in Part V and VI.

MKT4053 BUSINESS TO BUSINESS MARKETING

(3 units)

Pre-requisite(s): MKT2003 PRINCIPLES OF MARKETING MANAGEMENT

Course Description: The business-to-business arena entails a complex market of commercial enterprises, public organisations and government institutions. This course aims to teach the students to market products or services to other companies, government bodies, institutions, and other organisations. It also provides the student an overall understanding of the different components in the B2B market. Last but not least, it enables the students to learn the theories and practical skills in designing and managing the B2B marketing strategy effectively.

MT1003 MILITARY TRAINING

(2 units)

Pre-requisite(s): None

Course Description: This course aims to provide an introduction to the basic military theories and skills as well as a 14-day experiential outdoor training. It will enhance students' awareness of patriotism and national security and also improve their abilities in teamwork, willpower, and resilience which are essential to personal achievements and success.

MUS1043 MUSIC HISTORY: FILM MUSIC

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to further the student's appreciation of various types of film music from late 19th century to nowadays. Student will understand the collaborative process of various aspects of film music, the art of creating music specifically for film and how it complements the action in a film. It also aims to enhance students' musical experience by developing listening skills in order to recognize and analyse the techniques used in music composition to highlight or accompany the visual content. Film clip examples in class and reacting to the aural & visual material will help students to absorb new terminology and concepts specific to music and film production to be used throughout the course.

MUS1083 CHORAL STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on two main Areas of Study (AoS). AoS1 Practical Choral Skills aims to develop the practical skills of students in choral performance and provides opportunities within the weekly UIC Sinfonia Chorus rehearsals for the study and performance of choral works in the western classical tradition. This course will culminate in an end-of-semester concert. For AoS2 An Introduction to Choral Music students will learn about, and gain familiarity with, significant choral works of the western classical tradition. In particular, works will be analysed in terms of their form, instrumentation and texture, their historical and cultural contexts, and in relation to musical styles and genres.

MUS1093 MUSIC THEORY

(3 units)

Pre-requisite(s): None

Course Description: This course helps students to develop an understanding and greater appreciation of Western music by examining its basic materials and theoretical practices. It is designed to present the materials and fundamental principles of Western tonal music. Western tonal music represents one of the major global cultural influences of the 21st century, and a greater understanding and appreciation of its guiding principles will not only aid students in experiencing live and recorded musical performance, but will also lead them to a deeper appreciation of Western musical culture.

MUS1103 ORCHESTRAL STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on two main Areas of Study (AoS). AoS1 Orchestral Training aims to develop the practical skills of students in orchestral performance and provide opportunities for the study and presentation of orchestral music. In AoS2 Orchestral Repertoire students will explore key orchestral works in the standard repertoire and investigate the development of the symphony orchestra itself, from the Baroque period to the present day. Issues relating to developments in instrumentation and musical language will be considered. In addition, historical and aesthetic developments will be examined.

* Please note that all students must read music and play an orchestral instrument to a standard appropriate for an end-of-semester concert. *

MUS1113 INTRODUCTION TO WORLD MUSIC

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to develop music listening skills and appreciation of music from around the world. Students will study various musical genres focusing on music in a global context and will be able to identify: (i) the essential differences and overlapping similarities of the elements of the world's music; and (ii) organising principles of these musical elements by affective listening. Students will recognise and identify the music of many cultures. Major objectives are to distinguish given music genres, and to comprehend the roles and functions of music in the world.

MUS1123 CHAMBER MUSIC STUDIES

(3 units)

Pre-requisite(s): None

Course Description: The course aims to develop professional skills in the learning and performing of chamber music from the Western classical tradition to Non-Western classical music. Students will develop a range of skills including the performance of selected works, score reading and interpretation, critical listening, and inter-personal skills associated with working within small groups. Through weekly rehearsals, tutorials, participation in public performance, and performance assessment, students will become aware of the many factors involved in successful chamber music performance enhancing their practice in this area of musical development.

* Please note that all students must read music and play an orchestral instrument to a standard appropriate for an end-of-semester concert. *

MUS1153 THE ART AND CRAFT OF SONGWRITING

(3 units)

Pre-requisite(s): None

Course Description: The Art and Craft of Songwriting aims to empower the student to develop musical and creative skills such as lyric creation, rhythmic lyric structure, melodic flow, song form, and harmonic originality. As an essentially practical course, skills will be learned through studying techniques and the analysis of popular songs. No previous formal music study is assumed for this class; however, it will be necessary for students to have some facility in performing an instrument, writing music, or the ability to record sound files in MP3 format.

MUS1163 MUSIC THEORY AND EAR TRAINING I

(3 units)

Pre-requisite(s): None

Course Description: The course will help students develop an understanding and greater appreciation of Western music by examining its basic materials and theoretical practices. It is designed to present the materials and fundamental principles of Western tonal music. Western tonal music represents one of the major global cultural influences of the 21st century, and a greater understanding and appreciation of its guiding principles will not only aid students in experiencing live and recorded musical performances, but will also lead them to a deeper appreciation of Western musical culture. In addition, the principles of solfège technique will be introduced. Simple and compound rhythms will be performed and written for dictation. Melodies in major and minor keys will be sung and written for dictation. In addition, metre, scale, interval, figured bass and harmonization of a melody recognition exercises will be introduced and students will be asked to comment upon given works.

MUS1173 PERFORMANCE SKILLS I

(1 unit)

Pre-requisite(s): None

Course Description: This course develops foundation skills in the student's instrument technique. Students will study different performance skills according to instrumental branch. In addition, all students will study technical exercises and works of contrasting styles relevant to their instrument. Instrument-specific repertoire knowledge will be acquired through lectures, analysis of scores and listening through in class performances and assignments.

MUS1193 MUSIC THEORY AND EAR TRAINING II

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course builds on key concepts acquired in MUS1163 Music Theory and Ear Training I and introduces various compositional techniques used in western classical music. Particular emphasis will be placed on learning the essential principles of tonal harmonic grammar and melodic writing. Fundamentals of 4-part tonal writing will be introduced and regular resolution of chords including V, V^7, and vii^{o7}, 6-4 chords and rudimentary modulation techniques to close keys will be studied. Throughout, students will realize figured roman nomenclature and figured bass, harmonize a given bass or melody and identify chords in given excerpts. In addition, common rhythmic and melodic motifs will be identified in both solfège and dictation exercises. Irregular metres as well as triplets and duplets will be employed. Harmonic dictation will be introduced, including cadence, triad and seventh chord recognition, and students will be asked to comment upon given works.

MUS1203 PERFORMANCE SKILLS II

(1 unit)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I

Course Description: This course continues to develop skills in the student's instrument technique. Students will study in small groups according to instrumental branch: (i) Strings or (ii) Piano. Further work on aspects of instrument technique is developed. In addition, the student will practice exercises and perform a minimum of 2 musical works at the end of the semester before a jury. Instrument-specific repertoire knowledge will be acquired through reading and listening assignments.

MUS1223 MUSIC PERFORMANCE STUDIO I

(1 unit)

Pre-requisite(s): None

Course Description: The course aims to advance students' performance ability. Students will perform and listen to different performances by colleagues. Students will also learn to write concert program notes.

MUS1243 MUSIC PERFORMANCE STUDIO II

(1 unit)

Pre-requisite(s): None

Course Description: The course aims to advance students' performance ability. Students will perform and listen to different performances by colleagues. Students will also learn to write performance reviews.

MUS1263 PRIVATE INSTRUCTION I (PIANO)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in piano; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1273 PRIVATE INSTRUCTION I (VOICE)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in voice; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1283 PRIVATE INSTRUCTION I (STRINGS)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in one string instrument; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1293 PRIVATE INSTRUCTION I (WOODWIND)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in one chosen woodwind instrument; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1303 PRIVATE INSTRUCTION I (BRASS)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in one chosen brass instrument; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1313 PRIVATE INSTRUCTION I (PERCUSSION)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in percussion instruments; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1323 PRIVATE INSTRUCTION I (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): None

Course Description: The course aims to cultivate a college-level standard of technical and musical competence in one chosen Chinese instrument; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1333 PRIVATE INSTRUCTION II (PIANO)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1263 PRIVATE INSTRUCTION I (PIANO)

Course Description: The course aims to cultivate a college-level standard of performing competence in piano; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1343 PRIVATE INSTRUCTION II (VOICE)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1273 PRIVATE INSTRUCTION I (VOICE)

Course Description: The course aims to cultivate a college-level standard of performing competence in voice; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1353 PRIVATE INSTRUCTION II (STRINGS)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1283 PRIVATE INSTRUCTION I (STRINGS)

Course Description: The course aims to cultivate a college-level standard of performing competence in one string instrument; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1363 PRIVATE INSTRUCTION II (WOODWIND)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1293 PRIVATE INSTRUCTION I (WOODWIND)

Course Description: The course aims to cultivate a college-level standard of performing competence in one chosen woodwind instrument; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1373 PRIVATE INSTRUCTION II (BRASS)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1303 PRIVATE INSTRUCTION I (BRASS)

Course Description: The course aims to cultivate a college-level standard of performing competence in one chosen brass instrument; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1383 PRIVATE INSTRUCTION II (PERCUSSION)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1313 PRIVATE INSTRUCTION I (PERCUSSION)

Course Description: The course aims to cultivate a college-level standard of performing competence in percussion instruments; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS1393 PRIVATE INSTRUCTION II (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): MUS1173 PERFORMANCE SKILLS I and MUS1223 MUSIC PERFORMANCE STUDIO I, or MUS1323 PRIVATE INSTRUCTION I (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate a college-level standard of performing competence in one chosen Chinese instrument; to establish an understanding of musical styles of all historical periods relevant to the instrument: and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2003 COMPOSITIONAL TECHNIQUES

(3 units)

Pre-requisite(s): MUS1093 MUSIC THEORY

Course Description: This course builds on key concepts acquired in Music Theory and introduces various compositional techniques used in western classical music. Particular emphasis will be placed on learning the essential principles of tonal harmonic grammar and melodic writing. This course broadly covers two Areas of Study. AoS1 Compositional Techniques in Western Tonal Music will focus on musical analysis and will develop the students' ability to identify various compositional techniques used in important works within western music. For AoS2 Compositional Techniques in Practice students will use various acquired techniques creatively in order to compose short stylistically appropriate musical passages.

MUS2013 HISTORY OF WESTERN CLASSICAL MUSIC (1600 TO 1800)

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to further the student's appreciation of Western classical music from the Baroque era to the Classical era, with an emphasis on specific musical styles, cultural backgrounds, selected composers and their compositions. It aims to enhance students' musical experience by developing listening skills and knowledge of diverse forms, genres, and forms of instrumentation. Major composers and their works will be placed in musical, historical and cultural contexts. Weekly lectures featuring demonstrations and reading will focus on great Baroque and Classical music composers from 1600 to 1800 and their contributions to music. Emphasis will be placed on developing a thorough knowledge of music history, literature and musicianship. Exercises will aim at improving music listening skills by learning how to identify instruments in solo, chamber, and orchestral music. Students will also develop musical language, recognise notes and rhythms and terminology for that purpose.

MUS2023 HISTORY OF WESTERN CLASSICAL MUSIC (1800 TO 1945)

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to study Western classical music from 1800 to 1945, with an emphasis on Romantic and modern musical styles, culture and composers. It aims to enhance students' musical experience by developing listening skills and knowledge of diverse forms, genres, and forms of instrumentation. Major composers and their works will be placed in musical, historical and cultural contexts. Weekly lectures featuring demonstrations and reading will focus on great Baroque and Classical music composers from 1800 to 1945 and their contributions to music. Emphasis will be placed on developing a thorough knowledge of music history, literature and musicianship. Exercises will aim at improving music listening skills by learning how to identify instruments in solo, chamber, orchestral music. Students will also develop musical language, recognise notes and rhythms and terminology for that purpose.

MUS2033 AURAL TRAINING

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to develop the musical ear to recognise and interpret rhythm, pitch and musical patterns and to improve general musicality at the intermediate level. The course also develops fluency with musical notation, musical memory and inner hearing. Students will develop skills in sight singing, and listening, receive training in the ability to sing scales, melodies, chords, and rhythmic patterns and be able to demonstrate

the ability to transcribe tonal music accurately.

MUS2043 MUSIC HARMONY AND ANALYSIS I

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course will develop the skills acquired in previous theory courses and it will particular emphasize the analysis of Western Classical music during the eighteenth century. This course aims to enable students to learn the practical applications of harmony and music structure through the use of chord progressions, dissonance treatment, and modulation techniques. The course will also help students to enhance analytical abilities, aural memorization, and score-reading of various music literatures. The general terminology of harmony and application of theoretical concepts are also introduced.

MUS2053 ADVANCED PERFORMANCE SKILLS I

(1 unit)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II

Course Description: Advanced skills relating to instrument technique are developed. Students in the Performance Stream are required to take this course, with students working in small groups according to instrumental branch: (i) Strings or (ii) Piano. In addition to a midterm technical assessment and the end of semester juried assessment, each student must perform a minimum of one work (or movement of a work) in a public concert on campus (usually as part of the Lunchtime Concert Series). Building on the foundation skills acquired in Performance Skills I and II, students will develop instrument-specific techniques through exercises. A minimum of 3 works must be performed in the end-of-semester juried examination. In addition, related repertoire knowledge will be expanded through reading and listening assignments.

MUS2063 ADVANCED PERFORMANCE SKILLS II

(1 unit)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I

Course Description: Advanced skills relating to instrument technique are developed. Students in the Performance Stream are required to take this course, with students working in small groups according to instrumental branch: (i) Strings or (ii) Piano. In addition to a midterm technical assessment and the end of semester juried assessment, each student must perform a minimum of one work (or movement of a work) in a public concert on campus (usually as part of the Lunchtime Concert Series). Building on the foundation of skills acquired in Performance Skills I and II, students will develop instrument-specific performance technique through exercises. A minimum of 3 works must be performed in the end-of-semester juried examination. In addition, related repertoire knowledge will be expanded through reading and listening assignments.

MUS2073 STUDIO RECORDING TECHNIQUES

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course focuses on sound recording and microphone techniques through hands-on experience. Principles and knowledge relating to the creative use of music technology with be introduced. During the lessons, students will understand the historical, aesthetic, and social contexts of audio recording in order to make high quality recordings using a wide array of tools and techniques. Throughout, particular emphasis is placed on using music technology as a creative tool in the compositional process. Each week a new topic will be introduced and students will explore new ideas in a series of short tasks. Working in small groups, students will complete projects drawing together the various techniques they have acquired throughout the course.

MUS2083 FROM CHARLIE CHAPLIN TO JOHN WILLIAMS. FILM MUSIC: HISTORY AND THEORY

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course provides an overview of the important developments in this history of film music, with particular reference to English language cinema. Significant developments in technology, society and business practice are examined and the various movie studios and composers are studied. Key terminology used to describe the function of music and sound in films are introduced and applied to various case studies. Each student will submit a written review of the use of music in a selected scene and students will work in small groups to create a video project.

MUS2093 INSTRUMENT PEDAGOGY

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course develops knowledge and skills in teaching instrumental music (individual and ensemble) at various instructional levels with studying of various pedagogical materials and methods. Latest music teaching technology and music applications are also introduced for students to enhance the quality of music lesson. Opportunities will be given to students to gain experience of teaching both through observation and through practice. Students are encouraged to apply pedagogical methods, materials, concepts and skills to classroom settings. Classroom observation is also designed to help students have a better understanding for their teaching skills and take appropriate action to improve their teaching quality.

MUS2103 POPULAR MUSIC

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course examines the history of western popular music, from Tin Pan Alley, the development of the grapmophone record and the rise of the popular music industry. This course covers two Areas of Study: AoS1, Popular Music History and Analysis will focus on the trends in popular music with be studied in relation of other cultural and historical events. Furthermore, various key artists will be considered and selected works will be analysed. Significant concepts, terms and technical languages are introduced to identify various artists and genre. In AoS2, Popular Music Practice and Recording students will appreciate various greatest hits by playing and recording during the lesson. Ultimately students will realize the differentiation of the characteristics of the multiple styles of music and understand how

technological innovations relate to popular music.

MUS2113 ESSENTIALS OF SONG-WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop the students' creative skills focusing on lyrics writing, rhythmic cohesion, melodic and harmonic originality, song forms, and making a recording. After an introduction to musical terms and concepts, students will apply specifics aspects of songwriting in various musical styles. The course concludes with students writing a full-length song based on the skills and knowledge learned during the semester.

MUS2123 MUSIC BUSINESS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The course will illustrate different key areas of music business such as music & arts management, music production and merchandizing, publishing and distribution. The structure and mechanism of music industry in different country will also be introduced by studying different business cases and data. It will help students to think critically and managerially about the future music and discern different possibilities of their music career path.

MUS2133 MUSIC HARMONY AND ANALYSIS II

(3 units)

Pre-requisite(s): MUS2043 MUSIC HARMONY AND ANALYSIS I

Course Description: This course will introduce the harmonic language of the Romantic period and illustrate the principle of voice-leading, modulation, extended tonality, harmonic progressions and melodic motion in the 19th century chromatic style. The Music literature of this period will also be analysed, with a particular focus on the works by Schubert, Chopin, Brahms, Liszt, Wagner and Mahler. The course will also help students to enhance their analytical abilities, aural memorization, and score-reading in this repertoire. The terminology and theoretical concepts of the Romantic period are also introduced with the aim of applying these concepts to analyse and understand the music.

MUS2143 CHINESE MUSIC: HISTORY AND THEORY

(3 units)

Pre-requisite(s): None

Course Description: This course explores various musical traditions, genres and instruments in China. By the end of the course, students should be able to identify the salient features of a given musical genre and comment on its historical, ritualistic and aesthetic contexts. In addition, students should demonstrate an awareness of the different types of notation and their relationships to performance.

MUS2153 PSYCHOLOGY OF MUSIC EDUCATION

(3 units)

Pre-requisite(s): None

Course Description: This course examines key issues in the psychology of music, including cognition of musical structure, emotion and meaning in music, development psychology of music and psychological approaches to performance, with specific reference to their application within the field of music education. Important theorists and their studies will be discussed.

MUS2183 KEYBOARD PERFORMANCE STUDIES I

(3 units)

Pre-requisite(s): None

Course Description: The course is designed for students who have learned the piano for a number of years, who wish to advance their knowledge of the keyboard repertoire and develop musical and technical skills. Focused on keyboard music of the 17th-18th centuries, the course will help students gain a comprehensive overview of the development of the keyboard and consolidate their knowledge of important works in the keyboard repertoire. Students will learn to distinguish the styles of Baroque and Classical music and performance practices of those periods. Through practising and performing works by major composers such as J.S. Bach, Haydn and Mozart, students will acquire essential knowledge on piano playing, such as tackling counterpoint, terrace dynamics smooth scales and arpeggio work, balance and phrasing.

MUS2193 KEYBOARD PERFORMANCE STUDIES II

(3 units)

Pre-requisite(s): MUS2183 KEYBOARD PERFORMANCE STUDIES I

Course Description: This course builds on the foundation laid in Keyboard Performance Studies I and traces the progress of the development of piano music as a genre and different schools of piano playing and technique through to the 20th Century. It will guide the students to explore the richness and diversity of styles of Romantic and 20th Century piano literature and examine landmark recordings by distinguished pia-nists. Compositions by Franz Schubert (1797-1828), Frederic Chopin (1810-1849) , Robert Schu-mann (1810-1856) , Franz Liszt (1811-1886) , Johannes Brahms (1833-1897), Claude Debussy (1862-1918), Sergei Prokofiev (1891-1953), Sergei Rachmaninoff (1873-1943), George Gershwin (1898-1937) and Béla Bartók (1881-1945) from the Romantic and 20th Century period will be taught. Core works including character pieces, nocturnes, impromptus, ballades, scherzi, preludes and other important works studied and performed by the students.

MUS2203 ENSEMBLE STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course explores the repertoire and essential ensemble skills in instrumental/vocal technique, expression and performance. Students will be required to form a group (maximum 6 players for instrumental group; maximum 16 singers for vocal ensemble) and attend regular weekly training. Each group has to focus on the stylistic and interpretative characteristics of assigned repertoire as well as performance planning, individual preparation, practice, and rehearsals. These groups are required to perform in a concert in the end of semester.

MUS2213 TECHNOLOGY OF MUSIC AND SOUND FOR SCREEN

(3 units)

Pre-requisite(s): MUS1093 MUSIC THEORY

Course Description: This course introduces fundamental and

concepts of creating music and design sound for screen in different styles. Two Areas of Study will be covered: This course covers two Areas of Study. AoS1 Fundamental Concept of Film music and sound will introduce aesthetics, terminology, procedures, and technical aspects of film music. Concepts and applications of leitmotifs, functions of film scoring and sound design is also introduced. In AoS2 Music and Sound for Videos, students will explore the creative possibilities of combining music with short video by using various digital audio workstation (such as Pro tools, Garage band) and music notation software (Sibelius). Various techniques and knowledge of music production such as instrument and sound recording and production, MIDI sequencing, audio and video synchronization, audio editing will be introduced and put into practice. Each week a new topic will be introduced and students will explore new ideas in a series of short tasks. Working in small groups, students will complete two projects with using various techniques they have acquired throughout the course. Projects will be submitted at the midterm examination period and at the culmination of the course.

MUS2223 HISTORY OF WESTERN CLASSICAL MUSIC: THE AMERICAN MUSICAL

(3 units)

Pre-requisite(s): None

Course Description: The course aims to explore the evolution of musical theatre in the twentieth century. Genres explored include operetta, burlesque, vaudeville, tin pan alley, the minstrel show, revue, and musical comedy. Major figures discussed will include lyricists (including librettists/book-writers), composers and master pieces. The history and cultural influence will be explored within a social-historical context. Students will be expected to utilize knowledge of musical terminology and to create a musical performance in the class.

MUS2233 VOCAL LITERATURE AND REPERTOIRE

(3 units)

Pre-requisite(s): None

Course Description: The course aims to survey the development of the western vocal literature from the Renaissance to the present, with emphasis on vocal music written in Italian, French, German and English. Opera, oratorio, orchestra with choir, and musical theatre will be selected and discussed in the class.

MUS2253 MUSIC PERFORMANCE STUDIO III

(1 unit)

Pre-requisite(s): None

Course Description: This course is designed to complement the learning in the course advanced performance skills. Students will perform and receive feedback to improve their musical understanding and instrumental techniques. Students will also write detailed concert reviews based on stylistic aesthetics, performance practices, and analytical techniques.

MUS2263 MUSIC PERFORMANCE STUDIO IV

(1 unit)

Pre-requisite(s): None

Course Description: This course is designed to complement the learning in the course advanced performance skills. Students will perform and receive feedback to improve their musical understanding and instrumental techniques. Students will also write detailed concert reviews based on stylistic aesthetics, performance practices, and analytical techniques.

MUS2273 KEYBOARD SKILLS I

(3 units)

Pre-requisite(s): MUS1193 MUSIC THEORY AND EAR TRAINING II, or Instructor's permission

Course Description: This course is the first part of a two-semester sequence. It will help students to develop a comprehensive set of practical musicianship skills. Upon successful completion of this course, students will have gained basic music literacy and musicianship skills at the keyboard. These skills have wide-ranging real-world applications, e.g., learning new music quickly, learning new types of music, collaboration with other musicians, composition, improvisation, and teaching.

MUS2283 KEYBOARD SKILLS II

(3 units)

Pre-requisite(s): MUS2273 KEYBOARD SKILLS I, or Instructor's permission

Course Description: This course is the second part of a two-semester sequence. It will continue the development of the practical musicianship skills covered in Keyboard Skills I. Upon successful completion of this course, students will have acquired advanced music literacy and musicianship skills at the keyboard. These skills have wide-ranging real-world applications, e.g., learning new music quickly, collaboration with other musicians, composition, improvisation, research, conducting, and teaching.

MUS2293 PRIVATE INSTRUCTION III (PIANO)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1333 PRIVATE INSTRUCTION II (PIANO)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in piano; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2303 PRIVATE INSTRUCTION III (VIOCE)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1343 PRIVATE INSTRUCTION II (VIOCE)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in voice; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2313 PRIVATE INSTRUCTION III (STRINGS)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1353 PRIVATE INSTRUCTION II (STRINGS)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in one string instrument; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2323 PRIVATE INSTRUCTION III (WOODWIND)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1363 PRIVATE INSTRUCTION II (WOODWIND)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in one chosen woodwind instrument; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2333 PRIVATE INSTRUCTION III (BRASS)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1373 PRIVATE INSTRUCTION II (BRASS)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in one chosen brass instrument; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2343 PRIVATE INSTRUCTION III (PERCUSSION)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1383 PRIVATE INSTRUCTION II (PERCUSSION)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in percussion instruments; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2353 PRIVATE INSTRUCTION III (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): MUS1203 PERFORMANCE SKILLS II and MUS1243 MUSIC PERFORMANCE STUDIO II, or MUS1393 PRIVATE INSTRUCTION II (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate an advanced college-level standard of technical and musical competence in one chosen Chinese instrument; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2363 PRIVATE INSTRUCTION IV (PIANO)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2293 PRIVATE INSTRUCTION III (PIANO)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in piano; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2373 PRIVATE INSTRUCTION IV (VOICE)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2303 PRIVATE INSTRUCTION III (VOICE)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in voice; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2383 PRIVATE INSTRUCTION IV (STRINGS)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2313 PRIVATE INSTRUCTION III (STRINGS)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in one string instrument; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2393 PRIVATE INSTRUCTION IV (WOODWIND)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2323 PRIVATE INSTRUCTION III (WOODWIND)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in one chosen

woodwind instrument; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2403 PRIVATE INSTRUCTION IV (BRASS)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2333 PRIVATE INSTRUCTION III (BRASS)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in one chosen brass instrument; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2413 PRIVATE INSTRUCTION IV (PERCUSSION)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2343 PRIVATE INSTRUCTION III (PERCUSSION)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in percussion instruments; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2423 PRIVATE INSTRUCTION IV (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): MUS2053 ADVANCED PERFORMANCE SKILLS I and MUS2253 MUSIC PERFORMANCE STUDIO III, or MUS2353 PRIVATE INSTRUCTION III (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate an advanced college-level standard of performing competence in one chosen Chinese instrument; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS2433 INTRODUCTION TO MUSICAL THEATRE

(2 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students from various disciplines to the art form of. musical theatre, providing them with a broad understanding and appreciation. By exploring select productions such as The Lion King, Something Rotten!, and Avenue Q (examples only), students will gain insights into the cultural and artistic significance of musical theatre. The course fosters an environment where students can engage with this art form creatively and reflectively without the need for prior musical training. A key focus will be on developing critical thinking skills as students analyze and discuss various aspects of musical theatre.

MUS3003 MUSIC SINCE 1945

(3 units)

Pre-requisite(s): MUS1093 MUSIC THEORY

Course Description: This course explores western art music of the 20th and 21st century. Various compositional techniques will be examined and aesthetic approaches within their historical and cultural contexts will be discussed. This course broadly covers two Areas of Study. AoS1 Musical Modernism will focus on music in the first half of the 20th century and will involve analysis of modernist techniques in the works of composers such as Claude Debussy, Igor Stravinsky, Arnold Schoenberg and Bela Bartok. In addition, various analytical techniques, including set theory, will be applied. AoS2 Postwar art music will examine various aesthetic trends and draw on postmodernist theory to examine the music of the Darmstadt School, the minimalist composers and other aesthetic approaches.

MUS3013 CREATIVE MUSIC TECHNOLOGY

(3 units)

Pre-requisite(s): MUS1093 MUSIC THEORY

Course Description: This course introduces fundamental principles and knowledge relating to the creative use of new music technology. This course mainly covers the Fundamentals of Music Technology and includes topics such as the key principles of sound recording and production, sequencing, microphone techniques, compression and limiting EQ reverb, delay and other effects, sound synthesis, mixing and mastering. Each week a new topic will be introduced and students will explore new ideas in a series of short tasks. Working in small groups, students will complete two projects with using various techniques they have acquired throughout the course. Projects will be submitted at the midterm examination period and at the culmination of the course.

MUS3023 TONAL COUNTERPOINT

(3 units)

Pre-requisite(s): MUS1093 MUSIC THEORY

Course Description: This course builds on key concepts acquired in Music Theory and examines fundamental techniques in the tonal counterpoint of the 18th century, with particular emphasis given to the works of J. S. Bach. This course broadly covers two Areas of Study. AoS1 Tonal Counterpoint Analysis will develop the students' ability to identify various contrapuntal techniques in given works. In addition, students will be expected to be able to identify the parts of a fugue. For AoS2 Tonal Counterpoint in Practice students will use an expanded 'Species' approach to learning contrapuntal technique in the form of short written exercises written is historically accurate 18th style.

MUS3033 FORM AND STYLE I

(3 units)

Pre-requisite(s): MUS2133 MUSIC HARMONY AND ANALYSIS II

Course Description: This course builds on key concepts acquired in MUS2043 Music Harmony and Analysis I and MUS2113 Music Harmony and Analysis II and introduces various conceptions of musical form. Various topics will be examined, including phrase form, binary and ternary forms, theme and variations, fugal form and sonata form. Particular focus will be given to suites and fugues by J. S. Bach as well as the piano sonatas and string quartets by Haydn, Mozart and Beethoven. This course is designed to

complement the concurrent course History and Repertoire of Baroque and Classical Music.

MUS3043 FORM AND STYLE II

(3 units)

Pre-requisite(s): MUS3033 FORM AND STYLE I

Course Description: This course builds on key concepts acquired in MUS3033 Form and Style I and introduces new Romantic approaches to Classical forms: Sonata, Fantasia and Variations as well as new forms like Song cycles, Caprices, Ballades, Impromptus, or Waltzes. Various topics will be examined, including the development of new harmonic means, altered chords, chromatic harmony, modulation techniques and extended tonality. Particular focus will be given to key works by Chopin, Liszt, Brahms, Wagner and Tchaikovsky. This course is designed to complement the concurrent course of History and Repertoire of Romantic Music (1800-1900).

MUS3053 HISTORY AND REPERTOIRE OF BAROQUE AND CLASSICAL MUSIC

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course aims to explore the history, composers and masterpieces of Western classical music from the Baroque to the Classical period. The course will deepen on the great diversity of compositional aesthetics and styles during these two hundred years: from the first generation of Baroque composers like Monteverdi or Schütz to the most experimental pieces of Franz von Biber, the unusual orchestrations of Vivaldi, or the highest peaks in polyphonic complexity in Bach's Passions or Haendel's Messiah. From the first Classical string quartets by Haydn to the latest monumental symphonies by Beethoven.

MUS3063 HISTORY AND REPERTOIRE OF ROMANTIC MUSIC

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course aims to explore the history and repertoire of masterpieces of the Romantic period. The course will deepen on the great diversity of forms, compositional aesthetics and personal styles developed by the main composers: Berlioz, Chopin, Liszt, Verdi, Brahms, Wagner and Tchaikovsky. It will show the great variety of musical forms developed by the composers: Song cycles, Caprices, Ballades, Impromptus, Etudes, or Waltzes. As well as the Romantic revision of Classical forms: Sonata, Fantasia and Variations or the creation of Programme Music. Various analytical techniques will be utilized, including harmonic and formal analysis, analysis of the orchestration and where appropriate, Schenkerian Analysis. The aim is to enhance students' musical skills by developing an analytical listening and appreciation of diverse forms, genres, and instrumentations as well as a clear understanding of the use of tonality, altered chords, modulation and chromatism in the Romantic repertoire.

MUS3073 ENSEMBLE A: I

(1 unit)

Pre-requisite(s): None

Course Description: Through weekly rehearsals, students develop essential ensemble and musicianship skills. Students must join one of the Music Programme ensembles currently available: Orchestra, Choir, Chamber Ensemble, Jazz Ensemble and Chinese Music Ensemble. It is anticipated that additional ensembles will be opened in the future. Each semester, there will be a minimum of one public concert arranged for all players in each ensemble. In addition to the practical rehearsals, students will be given reading, writing and listening assignments to broaden their knowledge of related repertoire. Please note that enrollment for each ensemble is dependent on an audition to be conducted at the beginning of the semester. Moreover, students who are admitted to a particular ensemble for Ensemble A: I must remain in the same ensemble for Ensemble A: II.

MUS3083 ENSEMBLE A: II

(1 unit)

Pre-requisite(s): MUS3073 ENSEMBLE A: I

Course Description: Through weekly rehearsals, students develop essential ensemble and musicianship skills. For this course, each student must continue in the same ensemble s/he selected for Ensemble A: I. The ensembles currently available are Orchestra, Choir, Chamber Music Ensemble, Jazz Ensemble and Chinese Music Ensemble. Each semester, there will be a minimum of one public concert arranged for all players in each ensemble. In addition to the practical rehearsals, students will be given reading, writing and listening assignments to broaden their knowledge of related repertoire.

MUS3093 ENSEMBLE B: I

(1 unit)

Pre-requisite(s): MUS3083 ENSEMBLE A: II

Course Description: Through weekly rehearsals, students develop essential ensemble and musicianship skills. For Ensemble B, students must join a different Music Programme ensemble from the ensemble they selected for Ensemble A. The ensembles currently available are: Orchestra, Choir, Chamber Ensemble, Jazz Ensemble and Chinese Music Ensemble. In addition, Performance Stream piano students may also study accompanying techniques' and Composition Stream students may gain experience of conducting. Each semester, there will be a minimum of one public concert arranged for all players in each ensemble. In addition to the practical rehearsals, students will be given reading, writing and listening assignments to broaden their knowledge of related repertoire. Please note that enrollment for each ensemble is dependent on an audition to be conducted at the beginning of the semester. Moreover, students who are admitted to a particular ensemble for Ensemble B: I must remain in the same ensemble for Ensemble B: II.

MUS3103 ENSEMBLE B: II

(1 unit)

Pre-requisite(s): MUS3093 ENSEMBLE B: I

Course Description: Through weekly rehearsals, students develop essential ensemble and musicianship skills. For this course, each student must continue in the same ensemble or option s/he selected for Ensemble B:I. The ensembles currently available are Orchestra, Choir, Chamber Music Ensemble, Jazz Ensemble Chinese Music Ensemble as well as the option to study accompanying techniques and conducting. Each semester, there will be a minimum of one public concert arranged for all players in each ensemble. In addition

to the practical rehearsals, students will be given reading, writing and listening assignments to broaden their knowledge of related repertoire.

MUS3113 PRINCIPAL STUDY I: PERFORMANCE

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II

Course Description: In this course students will develop high level technical skills in their chosen Principal study instrument. All students are required to take this course. This is the first of three courses (Principal Study II: Performance and Principal Study III: Performance) designed to prepare students for the Final Year Project public full recital. In addition to technical exercises selected by the instructor to address any remaining weaknesses in technique, the student will expand their performance repertoire. The student will perform 3 musical works at the end of the semester before a jury and must play at least one work in a public concert (typically in the Lunchtime Concert Series). A research topic, selected in consultation with the instructor and based on an area relating to the violin and its repertoire, will be undertaken culminating in the submission of a short essay 800-1200 words long.

MUS3123 PRINCIPAL STUDY II: PERFORMANCE

(2 units)

Pre-requisite(s): MUS3113 PRINCIPAL STUDY I: PERFORMANCE

Course Description: In this course students will develop high level technical skills in their chosen Principal study instrument. All students are required to take this course. This is the second of three courses (Principal Study I: Performance, Principal Study II: Performance and Principal Study III: Performance) designed to prepare students for the Final Year Project public full recital.

MUS3133 JAZZ HARMONY

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course designed to introduce the language of jazz through practical application of jazz harmony via in-depth analysis, practical application of jazz techniques, simple transcription exercises and in-class listening. Participants of this course will deal with the concepts of jazz harmony with the study of the harmony of standard jazz repertoire. Students will learn to understand notation and realization of harmony in jazz music, chord progressions, lead sheet symbols and use basic harmonic rules and the typical harmonic devices, diatonic progression and chord patterns with a view to generating a creative sense of jazz harmony.

MUS3143 COMPOSING AND ARRANGING MUSIC FOR EDUCATION

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course is designed to demonstrate essential skills to compose and arrange music for different groups (i.e. school choir with piano accompaniment, school music assemblies), type and level for educational purposes. On purpose of developing pupils' musical skill, various educational principles are also applied into music. Students will exercise imagination and skill to compose and arrange music appropriate to various technical levels. Opportunities will be given to students to gain experience of teaching both through observation and through practice.

MUS3263 MUSIC PERFORMANCE STUDIO V

(2 units)

Pre-requisite(s): None

Course Description: This course is designed to complement the learning in the course Principal Study I: Performance. Students will perform and receive feedback to improve their musical understanding and instrumental techniques. Students will also write two long essays on their own performances justifying their performance approaches. These essays will be analytical and will provide detailed examples of musical structure, phrasing, stylistic comprehension and performance techniques.

MUS3283 VOCAL PEDAGOGY

(3 units)

Pre-requisite(s): None

Course Description: This course is to teach vocal students how to explore the anatomy, physiology, acoustics, pedagogical techniques, and methodology in vocal teaching for solo, studio, classroom, and ensemble. The teaching skill and knowledge needs to include the function of the voice for male and female, four language (Italian, German, French, English), effective vocal production in both studio and ensemble in the twenty-first century. Students will be expected to explore the teaching experience through weekly voice lessons followed by reading, research, presentation, and discussion. The selected repertoire in four major language and the historical background of each piece will be chosen from the middle ages to the present day

MUS3303 MUSICAL THEATRE

(3 units)

Pre-requisite(s): None

Course Description: Musical theatre is a form of theatrical performance that combines songs, spoken dialogue, acting, and dance. It is our goal to teach students the skills necessary to be successful in the popular and competitive professional musical theatre world. To develop that skill-set, students receive a broad education in all three area of Music Theatre. Additional training is given in Musical Theatre specifically to help students learn how to use some analyse skills of these areas together in the particular genre that is the American Musical and other Musicals in the world, students also have opportunities to learn about the history background and Musical composition skill from this course.

MUS3313 MUSIC CAREER PLANNING SEMINAR

(3 units)

Pre-requisite(s): None

Course Description: This course develops students' awareness and provides hands-on, real-world experiences of music and entertainment as a business in the 21st Century. Students will conduct self-directed research into their future career path in addition to developing and applying strategies for independent music success. This will lead to creation of job-search materials and a final portfolio which can be used for artist self-promotion or in graduate school applications.

MUS3323 MUSICAL ARTS INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The aim of the internship Program is to provide real-world experience that enables students to put knowledge into action. An internship can help student deepen understanding of the organizational operation and gain relevant skills. Thus, the experiences can benefit to students who apply for further study or jobs in the future. Internship also pave the way to enable students to experience aspects of practice and provide the opportunity for them to work in areas of the field outside their specific expertise; to enable students to observe, analyze, and comment on the interaction between theoretical and practical issues of their programme as it is practiced; and to establish connections between practice and the development of relevant directions. During the work process, students are expected to cultivate team spirits, interpersonal skills and knowing self-limits.

MUS3333 PRIVATE INSTRUCTION V (PIANO)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2363 PRIVATE INSTRUCTION IV (PIANO)

Course Description: The course aims to cultivate a standard of technical and musical competence in piano at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3343 PRIVATE INSTRUCTION V (VOICE)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2373 PRIVATE INSTRUCTION IV (VOICE)

Course Description: The course aims to cultivate a standard of technical and musical competence in voice at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3353 PRIVATE INSTRUCTION V (STRINGS)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2383 PRIVATE INSTRUCTION IV (STRINGS)

Course Description: The course aims to cultivate a standard of technical and musical competence in one string instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3363 PRIVATE INSTRUCTION V (WOODWIND)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2393 PRIVATE INSTRUCTION IV (WOODWIND)

Course Description: The course aims to cultivate a standard of technical and musical competence in one chosen woodwind instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3373 PRIVATE INSTRUCTION V (BRASS)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2403 PRIVATE INSTRUCTION IV (BRASS)

Course Description: The course aims to cultivate a standard of technical and musical competence in one chosen brass instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3383 PRIVATE INSTRUCTION V (PERCUSSION)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2413 PRIVATE INSTRUCTION IV (PERCUSSION)

Course Description: The course aims to cultivate a standard of technical and musical competence in percussion instruments at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3393 PRIVATE INSTRUCTION V (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): MUS2063 ADVANCED PERFORMANCE SKILLS II and MUS2263 MUSIC PERFORMANCE STUDIO IV, or MUS2423 PRIVATE INSTRUCTION IV (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate a standard of technical and musical competence in one chosen Chinese instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3403 PRIVATE INSTRUCTION VI (PIANO)

(2 units)

Pre-requisite(s): MUS3333 PRIVATE INSTRUCTION V (PIANO)

Course Description: The course aims to cultivate a standard of

technical and musical competence in piano at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3413 PRIVATE INSTRUCTION VI (VOICE)

(2 units)

Pre-requisite(s): MUS3343 PRIVATE INSTRUCTION V (VOICE)

Course Description: The course aims to cultivate a standard of performing competence in voice at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3423 PRIVATE INSTRUCTION VI (STRINGS)

(2 units)

Pre-requisite(s): MUS3353 PRIVATE INSTRUCTION V (STRINGS)

Course Description: The course aims to cultivate a standard of performing competence in one string instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3433 PRIVATE INSTRUCTION VI (WOODWIND)

(2 units)

Pre-requisite(s): MUS3363 PRIVATE INSTRUCTION V (WOODWIND)

Course Description: The course aims to cultivate a standard of performing competence in one chosen woodwind instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3443 PRIVATE INSTRUCTION VI (BRASS)

(2 units)

Pre-requisite(s): MUS3373 PRIVATE INSTRUCTION V (BRASS)

Course Description: The course aims to cultivate a standard of performing competence in one chosen brass instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3453 PRIVATE INSTRUCTION VI (PERCUSSION)

(2 units)

Pre-requisite(s): MUS3383 PRIVATE INSTRUCTION V (PERCUSSION)

Course Description: The course aims to cultivate a standard of performing competence in percussion instruments at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS3463 PRIVATE INSTRUCTION VI (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): MUS3393 PRIVATE INSTRUCTION V (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate a standard of performing competence in one chosen Chinese instrument at the level of an accomplished college-level musician; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4003 HISTORY AND REPERTOIRE FROM 1900 AND BEYOND

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course explores western art music of the 20th and 21st century. Various compositional techniques and aesthetic approaches will be discussed within their historical and cultural contexts. It begins by briefly examining the Post-Romanticism movement, as well as Impressionism and the dissolution of tonality at the turn of the 20th century. After that, a great number of aesthetics and cultural movements are discussed as part of Modernism in the first half of the century including Symbolism, Cubism, Abstract Art, Futurism and Dadaism, Atonalism, Twelve-tone Music and Neoclassicism. The post-war period splits the century in two halves. The course then focuses on the Darmstadt School and subsequent explorations into chance and mobile form. Thereafter, developments through the 1970s and 1980s will be examined, in particular Minimalism, Spectralism and a return to tonality. Throughout, developments in technology affecting recording, manipulation and distribution of music will be considered and parallel developments in popular music will be examined.

MUS4013 PRINCIPLES OF MUSIC EDUCATION

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course is designed to provide students with an introduction to the field of music education. Included are topics related to learning theories, curriculum development, an overview of music teaching and learning, historical and philosophical foundations of music education, resources for teaching, twentieth-century and twenty-first century developments in music education as well as a consideration of music from diverse places around the world. Opportunities will be given to students to gain experience of teaching both through observation and through practice.

MUS4023 FINAL YEAR PROJECT (MUS)

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: The Final Year Project (FYP) is the culmination of the Music programme in which each student must direct a public project independently. Students will prepare for, promote and manage a public recital or public presentation of recordings of their performance activities. Throughout Year 4, the

student will meet with his/her supervisor on a regular basis. Seminars will be held at intervals during the semester to facilitate discussions and interactions among fellow students.

MUS4043 PRINCIPAL STUDY III: PERFORMANCE

(3 units)

Pre-requisite(s): MUS3123 PRINCIPAL STUDY II: PERFORMANCE

Course Description: In this course students will develop high level technical skills in their chosen Principal study instrument. This is the third of three courses (Principal Study I: Performance, Principal Study II: Performance and Principal Study III: Performance) designed to prepare students for the Final Year Project public full recital. In this course students will develop professional level technical skills in their instrument and will begin to learn works which will be performed in the Final Year Project recital. In addition to technical exercises selected by the instructor to address any remaining weaknesses in technique, the student will expand their performance repertoire.

MUS4053 MUSIC IN THE MEDIEVAL AND RENAISSANCE PERIODS

(3 units)

Pre-requisite(s): None

Course Description: As a level four course, this major elective course builds on musical abilities acquired in previous years: analytical techniques, historical methodologies, and research and music performance skills. Various topics will be examined, including the development of the ecclesiastical modes, the beginnings of polyphony and music notation during the medieval time (900-1400), and the rise of the Renaissance Polyphony as the golden age of counterpoint, imitative polyphony, and vocal textures in the period 1400-1600. Particular focus will be given to key works by Perotin, Machaut, Dufay, Ockeghem, Desprez, Lassus, Tallis, Byrd, Palestrina and Victoria. This course is designed to complement the courses of History and Repertoire in the Baroque and Classical Periods (1600-1800), and History and Repertoire of Romantic Music (1800-1900).

MUS4063 JAZZ IMPROVISATION

(3 units)

Pre-requisite(s): MUS3133 JAZZ HARMONY

Course Description: This course designed to introduce the language of jazz through practical application of jazz improvisation via music analysis, practical application of jazz techniques, simple transcription and arrangement exercises and in-class performance. Participants of this course will deal with the concepts of jazz harmony analyse with the study of the standard jazz repertoire. Students will learn to understand notation and realization in jazz music, chord progressions, lead sheet symbols and use basic harmonic rules, diatonic progression and chord patterns to improvise jazz music in class and performance.

MUS4073 CREATING MUSIC AND SOUND FOR NEW MEDIA

(3 units)

Pre-requisite(s): MUS1163 MUSIC THEORY AND EAR TRAINING I

Course Description: This course aims to create music and sound design for new media such as game, exhibition, commercial clip and interactive performance. It is a lecture and laboratory course that is to explore concepts of music creation for a variety of media in the twentieth-first century. Topics include music creation theory, structures, production, editing, recording, processing, programming, synchronization, and integration of sound and music in film, video, animation.

MUS4083 PRIVATE INSTRUCTION VII (PIANO)

(2 units)

Pre-requisite(s): MUS3403 PRIVATE INSTRUCTION VI (PIANO)

Course Description: The course aims to cultivate a standard of technical and musical competence in piano at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4093 PRIVATE INSTRUCTION VII (VOICE)

(2 units)

Pre-requisite(s): MUS3413 PRIVATE INSTRUCTION VI (VOICE)

Course Description: The course aims to cultivate a standard of technical and musical competence in voice at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4103 PRIVATE INSTRUCTION VII (STRINGS)

(2 units)

Pre-requisite(s): MUS3423 PRIVATE INSTRUCTION VI (STRINGS)

Course Description: The course aims to cultivate a standard of technical and musical competence in one string instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4113 PRIVATE INSTRUCTION VII (WOODWIND)

(2 units)

Pre-requisite(s): MUS3433 PRIVATE INSTRUCTION VI (WOODWIND)

Course Description: The course aims to cultivate a standard of technical and musical competence in one chosen woodwind instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4123 PRIVATE INSTRUCTION VII (BRASS)

(2 units)

Pre-requisite(s): MUS3443 PRIVATE INSTRUCTION VI (BRASS)

Course Description: The course aims to cultivate a standard of technical and musical competence in one chosen brass instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the chosen brass instrument; and to complement academic studies

by providing practical experience in a wide range of repertoire.

MUS4133 PRIVATE INSTRUCTION VII (PERCUSSION)

(2 units)

Pre-requisite(s): MUS3453 PRIVATE INSTRUCTION VI (PERCUSSION)

Course Description: The course aims to cultivate a standard of technical and musical competence in percussion instruments at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4143 PRIVATE INSTRUCTION VII (CHINESE INSTRUMENTS)

(2 units)

Pre-requisite(s): MUS3463 PRIVATE INSTRUCTION VI (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate a standard of technical and musical competence in one chosen Chinese instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire.

MUS4153 PRIVATE INSTRUCTION VIII (PIANO)

(3 units)

Pre-requisite(s): MUS4083 PRIVATE INSTRUCTION VII (PIANO)

Course Description: The course aims to cultivate a standard of performing competence in piano at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the piano; and to complement academic studies by providing practical experience in a wide range of repertoire. The final semester of private instruction also serves as a preparatory course for a performance-based Final Year Project (FYP).

MUS4163 PRIVATE INSTRUCTION VIII (VOICE)

(3 units)

Pre-requisite(s): MUS4093 PRIVATE INSTRUCTION VII (VOICE)

Course Description: The course aims to cultivate a standard of performing competence in voice at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the voice; and to complement academic studies by providing practical experience in a wide range of repertoire. The final semester of private instruction also serves as a preparatory course for a performance-based Final Year Project (FYP).

MUS4173 PRIVATE INSTRUCTION VIII (STRINGS)

(3 units)

Pre-requisite(s): MUS4103 PRIVATE INSTRUCTION VII (STRINGS)

Course Description: The course aims to cultivate a standard of performing competence in one string instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the string instrument; and to complement academic studies by providing practical experience in a wide range of repertoire. The final semester of private instruction also serves as a preparatory course for a performance-based Final Year Project (FYP).

MUS4183 PRIVATE INSTRUCTION VIII (WOODWIND)

(3 units)

Pre-requisite(s): MUS4113 PRIVATE INSTRUCTION VII (WOODWIND)

Course Description: The course aims to cultivate a standard of performing competence in one chosen woodwind instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the woodwind instrument; and to complement academic studies by providing practical experience in a wide range of repertoire. The final semester of private instruction also serves as a preparatory course for a performance-based Final Year Project (FYP).

MUS4193 PRIVATE INSTRUCTION VIII (BRASS)

(3 units)

Pre-requisite(s): MUS4123 PRIVATE INSTRUCTION VII (BRASS)

Course Description: The course aims to establish a high standard of performing competence in one chosen instrument; develop instrumental or vocal technique, musicianship, and an understanding of musical styles of all historical periods relevant to the chosen instrument; and complement academic studies by providing a practical experience of a wide-ranging repertoire. In addition, this course aims to prepare students for their capstone projects.

MUS4203 PRIVATE INSTRUCTION VIII (PERCUSSION)

(3 units)

Pre-requisite(s): MUS4133 PRIVATE INSTRUCTION VII (PERCUSSION)

Course Description: The course aims to cultivate a standard of performing competence in percussion instruments at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the percussion instruments; and to complement academic studies by providing practical experience in a wide range of repertoire. The final semester of private instruction also serves as a preparatory course for a performance-based Final Year Project (FYP).

MUS4213 PRIVATE INSTRUCTION VIII (CHINESE INSTRUMENTS)

(3 units)

Pre-requisite(s): MUS4143 PRIVATE INSTRUCTION VII (CHINESE INSTRUMENTS)

Course Description: The course aims to cultivate a standard of performing competence in one chosen Chinese instrument at the level of a concert-level student performer; to establish an understanding of musical styles of all historical periods relevant to the instrument; and to complement academic studies by providing practical experience in a wide range of repertoire. The final semester of private instruction also serves as a preparatory course for a performance-based Final Year Project (FYP).

OR2003 DYNAMIC PROGRAMMING

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I

Course Description: This course introduces dynamic programming ideas, including calculus of variations, variable-endpoint problems, maximum principle in control theory, and dynamic optimization. Students would learn the theory of dynamic programming, as well as its rich applications in science and economics. After studying this course students will have a better mastery of techniques in dynamic programming.

OR3003 LOGISTICS

(3 units)

Pre-requisite(s): None

Course Description: To provide an understanding of major areas in Logistics as well as to illustrate how to apply various skills and techniques in Logistics to solve and analyse various real problems. The emphasis will be on learning various models and techniques in Logistics. Many practical application models will be discussed and analysed.

OR3013 LINEAR PROGRAMMING AND INTEGER PROGRAMMING

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I

Course Description: To introduce fundamental theory, techniques and algorithms for linear programming and integer programming problems. It addresses both the basic as well as advanced topics in linear programming and integer programming. Several software packages will be also introduced.

OR3023 SIMULATION

(3 units)

Pre-requisite(s): STAT2003 ADVANCED STATISTICS or
STAT2023 ADVANCED PROBABILITY or
STAT2063 PROBABILITY THEORY or
STAT3083 APPLIED STATISTICS

Course Description: To introduce the basic computer simulation in various discrete systems. The aim is to model and simulate various practical systems in financial, transportation, and commercial applications. This course covers the basic concepts, models and computer software in simulating practical discrete systems.

OR4003 DYNAMIC PROGRAMMING INVENTORY CONTROL

(3 units)

Pre-requisite(s): OR3013 LINEAR PROGRAMMING AND INTEGER PROGRAMMING

Course Description: This is a continuation of OR3013 Linear Programming and Integer Programming. The course will introduce the basic and useful techniques in dynamic programming and inventory control. The course will be taught in a problem solving approach.

OR4013 ADVANCED TOPICS IN OPERATIONS RESEARCH

(3 units)

Pre-requisite(s): OR3013 LINEAR PROGRAMMING AND INTEGER PROGRAMMING

Course Description: This is a continuation of OR3013 Linear Programming and Integer Programming, and OR4003 Dynamic Programming and Inventory Control. Some advanced topics will be introduced to those students who are interested in mathematical models arising from industrial and commercial applications.

OR4023 OPTIMIZATION

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I or
MATH1003 LINEAR ALGEBRA, and
MATH1073 CALCULUS I or
MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

Course Description: This course introduces the fundamental theory and techniques for both unconstrained and constrained optimization. There will be an overview of the existing numerical software packages. Finally some interdisciplinary techniques and applications related to optimization will be discussed.

OR4033 NETWORK AND TRANSPORTATION MODELS

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I, and
OR4023 OPTIMIZATION

Course Description: This is a continuation of OR3013 Linear Programming and Integer Programming. Some basic topics related to networks will be introduced in this course. This course will be taught in a practical-oriented approach.

PHYS2003 PRINCIPLES OF PHYSICS

(3 units)

Pre-requisite(s): None

Course Description: This course teaches the basic principles of physics to explain the properties of heat, light, electricity, magnetism, and quantum mechanics of atoms and then apply the principles to study the functions of electronics, analytical instruments, environmental monitoring instruments, solar panel, etc. In addition, the impacts of important physical phenomena such as air movement, light scattering by particulate matter, global warming, solar radiation, radioactivity, etc. on the formation of environmental risks and pollutions will be analysed. The basic principles of physics taught in this course can be applied not only to Environmental Science, but also to other sciences and everyday life.

POLS1003 FOUNDATIONS OF POLITICAL SCIENCE

(3 units)

Pre-requisite(s): None

Course Description: This course introduces to students a comprehensive review of the field of political science. To develop a strong foundation for more advanced levels of work in our programme, it is incumbent for all GAD students to take this course so that they will learn the basics of politics. Basic concepts, political theories and methodologies, political institutions, political parties are all examined. The subfields of comparative politics and international relations are also integral parts of the course so as to lay down the foundation for further studies. Political developments

in Europe, America and Asia are frequently employed as examples and related to the introduction of political ideas.

POLS1013 FOUNDATIONS OF WORLD GEOGRAPHY

(3 units)

Pre-requisite(s): None

Course Description: This course intends to familiarize Year 1 GIR students with basic concepts of world geography - and in particular human geography - which are essential for them to better make sense of the transnational socio-political and economic dynamics assessed in Year 2-Year 4 major courses. The course will introduce students to contemporary geography with particular focus on population, migration, linguistic and religious identities, nations, states, socio-economic development.

POLS2033 INTRODUCTION TO RESEARCH METHODS

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to enhance students' ability to perceive, evaluate and understand political and social phenomena through a systematic introduction to a wide range of approaches, methods and theories of political science. Basic research procedures and academic writing are the other foci of the course. Students are encouraged to analyse and explain the current political development of Europe, America, Asia and other regions with the help of particular perspectives and research methods.

POLS2073 COOPERATION AND PROGRESS IN THE GUANGDONG-HONG KONG-MACAU GREATER BAY AREA

(3 units)

Pre-requisite(s): None

Course Description: This timely course aims at familiarizing students with the latest governance trends concerning the development of the Pearl River Delta Greater Bay Area. Students will be provided analytical tools necessary to make sense of the integrated advantages of the Guangdong-Hong Kong-Macao region, its underlying cooperation mechanisms, its development prospects, as well as its potential to represent an important driver of cooperation both nationally and internationally.

POLS3003 PRINCIPLES OF INTERNATIONAL LAW

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to the major concepts in international law in the world today; help students become familiar with when and how international law can be used to resolve international disputes; and provide students with basic information on how China and other major countries view international law and international obligations, including the role international law plays in Chinese foreign policy.

POLS3093 INTERNATIONAL ORGANISATIONS

(3 units)

Pre-requisite(s): None

Course Description: Increasingly over the last 130 years, nation-states have agreed to found, fund, and join international organisations whose task is to oversee and organise the myriad global interactions which have increasingly become a part of daily life. As the actions of people and governments in one place increasingly affect the lives of people and the prerogatives and responsibilities of government in others, nation-states have ceded portions of their day to day sovereignty to international agencies and actors. Today, international organisations exercise globe-girdling responsibilities in areas that affect the daily life of nearly everyone. From transport to environmental pollution, from drug smuggling to AIDS, international organisations play a vital part in protecting life and imparting order to international intercourse. This course examines these international organisations and regimes which play such a vital role in today's world.

POLS3163 CONTEMPORARY EUROPE-ASIA INTERACTIONS

(3 units)

Pre-requisite(s): None

Course Description: The course aims at assessing the contemporary relations between Asia and Europe. It analyses the regions' internal and external dynamics, including European colonial rule and its legacy, the evolution of interregional relations "as equals", and the current intense politico-economic interdependence.

POLS3203 INTRODUCTION TO SUSTAINABLE DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: The course aims at familiarising students with key principles of sustainable development governance. The adoption of the "Sustainable Development Goals" (hereinafter, SDGs) by the UN in September 2015 has officially highlighted the urgent need for a paradigmatic shift towards holistic development governance that may deliver comprehensive solutions to the increasingly interconnected challenges of socio-economic progress. The course, therefore, intends to provoke students' analyses of both existing issues and available solutions, in the key realms of poverty reduction, equitable resource distribution, social inclusion, environmental preservation.

POLS3253 GLOBAL ROUTES OF TRADE AND INVESTMENT

(3 units)

Pre-requisite(s): None

Course Description: This course investigates the most relevant trade and investment routes of our time, across both established and emerging contexts, such as "BRICS" countries, Central and South Asia, Sub-Saharan Africa. Course material shall cover managing institutions - from national governments to global and regional development banks - as well as infrastructure, key drivers and impact along the way. Particular attention will be dedicated to China's increasing share of global investment, its prominent role as agent of change in world politico-economic governance, and its groundbreaking strategies such as the "One Belt, One Road".

POLS3263 GLOBAL ENVIRONMENTAL GOVERNANCE

(3 units)

Pre-requisite(s): None

Course Description: This course aims at familiarising students with issues relating to climate change and natural resource governance in a post-COP21 (2015 Paris Conference) world.

Students shall not only analyse the most relevant environmental challenges at national, regional and global levels, but will also assess latest policies outputs and outcomes, as well as related market opportunities, thus analysing both public and private sector responses to the steep challenge of optimising human activities – such as energy consumption, waste disposal and food production - on a finite planet.

POLS3273 GROWTH, INNOVATION AND DEVELOPMENT: CASE STUDIES

(3 units)

Pre-requisite(s): None

Course Description: As economic growth remains crucial to socio-economic progress, both national and international institutions are expected to devise, support and implement conducive capacity-building policies that, in an ever-changing age of knowledge economy, may not only prove to be "quantitatively" successful, but also mindful of the quality and sustainability of the very progress they deliver. The course will explore a selection of case studies from across the globe to highlight the connection between governments' politico-economic strategies, economic growth and innovative entrepreneurship as crucial ingredients for lasting progress. Particular attention will be reserved to Chinese cases, so as to reflect the country's ongoing transition towards a more sustainable, high-value, knowledge-based development model; the course content will also include the study of "Research, Development, Demonstration and Deployment" (RDDD) patterns and policies, and the analysis of "innovation ecosystems" in both Asia and the Americas.

POLS3283 SOCIETY, ENVIRONMENT AND DEVELOPMENT IN AFRICA

(3 units)

Pre-requisite(s): None

Course Description: In the wake of the new millennium, Africa is increasingly dubbed as a land of hope and opportunities: its vibrant young population, unique wealth of natural resources, deepening international ties with emerging superpowers – i.e. China, above all - are finally making it conceivable for the continent to overcome "traditional" problems such as deep poverty and conflict. The course's main aims are familiarising students with Africa's human and physical geography, as well as stressing the close interdependence of social, environmental and economic factors. The course shall focus in particular on the analysis of a selection of Sub-Saharan development patterns that will encompass success stories, persisting challenges and market opportunities of both regional and global relevance. They will include East Africa's fast evolving Ethiopia, Kenya, Uganda, Rwanda and Tanzania; Nigeria, the oil-rich powerhouse; resource-rich but income-poor and restive Democratic Republic of Congo; the dynamic island economies of Seychelles, Madagascar and Mauritius.

POLS3303 GOVERNANCE AND SOCIETY IN NORTHEAST ASIA

(3 units)

Pre-requisite(s): None

Course Description: The course aims at familiarizing students with the distinctive traits of public governance as well as with the most significant social and economic trends characterizing modern Japan, North Korea (Democratic People's Republic of Korea) and South Korea (Republic of Korea).

POLS3313 GOVERNANCE AND SOCIETY IN NORTH AMERICA

(3 units)

Pre-requisite(s): None

Course Description: The course aims at familiarizing students with the most distinctive traits of public governance and the most relevant socio-economic trends in USA and Canada, with additional reference to their closely tied southern neighbour, Mexico.

POLS3323 GOVERNANCE AND SOCIETY IN LATIN AMERICA

(3 units)

Pre-requisite(s): None

Course Description: The course is designed for the discussion of a range of contemporary issues in the governance and society of modern Latin America, including the studies on cultural, social, and economic development for the countries in the region. Beginning in 1492, its conquest by the Spanish and Portuguese created a totally new social order based on domination, hierarchy, and the intermingling of European, African, and indigenous elements. After World War II, more analysts worked on describing Latin American economic growth and cultural traditions originated from their Spanish and Portuguese heritage. This course is designed deliberately to accommodate to the discretion and expertise of the instructor concerned, which would lead students to think and understand Latin American governance and society in a broad-gauge approach.

PRA2003 PRINCIPLES OF PUBLIC RELATIONS

(3 units)

Pre-requisite(s): None

Course Description: The primary aim of this course is to introduce students to the field of public relations with shared emphasis on theoretical foundations and practicum. Students achieve the understandings of basic PR skills and the relevant knowledge that are available to the PR professions in different industry and business settings by various practitioners' roles, professional orientation, and for contemporary topics of publics.

PRA2013 PRINCIPLES OF ADVERTISING

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introduction to advertising from an integrated marketing communication perspective and presents the subject in an interesting manner so that students can understand and apply it in real life settings. The role of advertising and its importance in society and its relevance to promotion are taught to students.

PRA2033 COMPUTER VISUAL DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide an overview of the tools, techniques and theories that are used to convey and manipulate messages to transmit meaning and values in visual communication. Students will investigate the use of shape, colour, hierarchy, scale, rhythm, balance, word/image relationships, and

typography as communicative tools. They will explore the role and function of Graphic Design as a visual language through a series of lectures, workshops and portfolio creation enabling an introduction to the field and its applications to industry.

PRA2053 CASES STUDIES IN PUBLIC RELATIONS AND ADVERTISING

(3 units)

Pre-requisite(s): None
Course Description: This practical course asks students to examine the history and practice of public relations and advertising by reading, interpreting, and analysing significant public relations and advertising cases. The course readings, lectures, and assessments train students to understand the decisions made by public relations and advertising professionals in order to meet the needs of their organisation, corporation, community, or government. After introducing the basics structure of cases and the relevance of case studies to ongoing professional development, students work in small groups to analyse individual case studies. These analyses will require the students to break cases apart into discrete sections and evaluate the efficacy of the research, objectives, strategies, and tactics used to solve the specific communication goals of each case.

PRA3003 CONSUMER BEHAVIOUR

(3 units)

Pre-requisite(s): PRA2013 PRINCIPLES OF ADVERTISING
Course Description: This course studies the role consumer behaviour plays in the development and implementation of advertising programs. The course will provide students with an in-depth understanding of the roles and functions of consumers in the market place. It examines the consumer decision-making process and how it varies for different types of purchases, the various psychological processes, including consumer learning process, and external factors, such as culture, social class, group influences, and situational determinants leading to satisfaction/dissatisfaction with a product/service.

PRA3013 PUBLIC RELATIONS WRITING

(3 units)

Pre-requisite(s): PRA2003 PRINCIPLES OF PUBLIC RELATIONS
Course Description: This course provides instruction and writing practice designed to develop professional-level writing skills for public relations practitioners. It emphasises the different approaches required for particular audiences and types of media.

PRA3023 ADVERTISING COPYWRITING

(3 units)

Pre-requisite(s): PRA2013 PRINCIPLES OF ADVERTISING
Course Description: This course deals with the concepts and techniques of by studying the importance of copywriting in the advertising process; setting standards for persuasive advertising copy, outlining the creative process involved and analysing the dynamic but delicate relationship between the copywriter and colleagues in other departments of an advertising agency. Throughout the course students will be exposed to practical exercises and case studies that use Chinese and English languages.

PRA3033 RESEARCH IN PUBLIC RELATIONS AND ADVERTISING

(3 units)

Pre-requisite(s): COMM3003 COMMUNICATION RESEARCH
Course Description: This course introduces students to research methods used in the fields of advertising and public relations. Students will be given a practical orientation of the activities involved in conceptualising, planning, organising, executing, and reporting research. Students will learn how to apply research to advertising and public relations strategies and goals.

PRA3053 ADVANCED DESIGN AND VISUALISATION

(3 units)

Pre-requisite(s): PRA2033 COMPUTER VISUAL DESIGN
Course Description: This course focuses on the creative and visual aspects of advertising design. Students are required to generate creative ideas and visualise their concepts aided by computer. Learning will be emphasised through the hands-on practice of assignments and projects.

PRA3063 DIGITAL MEDIA AND STRATEGIC COMMUNICATION

(3 units)

Pre-requisite(s): None
Course Description: This course introduces digital media from socio-cultural and technological perspectives and examines how it converges with traditional media in the context of public relations and advertising. This course will emphasize the uses and effects of various digital media, such as the internet, social media, digital gaming, and other digital technologies, in integrated marketing communications campaigns, public relations, advertising, and branding. This course aims to develop and equip students with the ability to plan, execute and evaluate digital media use in advertising and public relations campaigns.

PRA3063 AI AND STRATEGIC COMMUNICATIONS

(3 units)

Pre-requisite(s): None
Course Description: This course introduces AI from socio-cultural and technological perspectives, and examines how it converges with traditional media in the context of strategic communication. This course will emphasize the uses and effects of various digital media and AI in public relations, advertising, and marketing communications. This course aims to equip students with the ability to examine the prospective impacts of AI on strategic communication, as well as its long-term implications for policy, ethics, and labor/work.

PRA3073 BRANDING IN ADVERTISING

(3 units)

Pre-requisite(s): None
Course Description: This course aims to orient advertising students to the significance of brand personality within the advertising environment. The course uses cases to expose students to the challenges commonly faced by brand managers. Students will study existing brands, historically and creatively. After understanding some basics of brand history, students will be asked to examine the role of brands in consumer loyalty, corporate expansion and new markets. Topics include assessing brand meaning, brand positioning, evaluating profitability, assessing brand strength, evaluating brand

extensions and building brands through non-traditional media.

PRA3083 CRISIS MANAGEMENT AND RISK COMMUNICATION

(3 units)

Pre-requisite(s): PRA2003 PRINCIPLES OF PUBLIC RELATIONS

Course Description: This course investigates the contexts, theories, and strategies of crisis management and risk communication. The course will study common issues in corporate crisis management and examine risk communication from the perspective of an organisation in crisis. The course aims to teach students not only what an organisation can, and should, do during a crisis, but also what strategic public relations can do to prevent a crisis from happening. These objectives will be met through the study of relevant theories and concepts, the study of classic cases, and through practical application of the material in projects and presentations. The activities and assessments will emphasise the relationship between public relations and an organisation's successful handling of crises.

PRA3093 MEDIA AND EVENT PLANNING

(3 units)

Pre-requisite(s): PRA2003 PRINCIPLES OF PUBLIC RELATIONS, or
PRA2013 PRINCIPLES OF ADVERTISING

Course Description: This course introduces the principles and practices of advertising media planning introducing the process of evaluating and selecting advertising media to meet specific strategic marketing goals, and also focuses on public relations' event planning that introduce event types and strategic planning for certain public relations event in communication, group work and reflection through experiential learning activities. The course will equip the student with understanding of the concepts, roles and tasks of a media and event planner and developing effective strategies and techniques required to develop effective advertising and public relations plans, negotiation, media buying, and sales delivery of integrated brand marketing communications and of the strategic usage and strengths of various media and event forms.

PRA3113 PHOTOGRAPHY AND VIDEOGRAPHY IN ADVERTISING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to equip students with foundational advertising photography and video production theory and skills, to better prepare them for the professional field of advertising and public relations. By successful completion of this course, students are expected to be able to 1) Critically analyse works of advertising on multimedia platforms; 2) Produce and integrate the production to the central strategy of a campaign.

PRA4003 ADVERTISING AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: The course provides an in-depth examination of advertising as a form of social communication in contemporary society. Stressed are the meanings and functions of advertising in modern culture and advertising's psychological, ideological, and sociological implications. Relevant ethical dimension and responsibilities are considered.

PRA4013 SPECIAL TOPICS IN PUBLIC RELATIONS AND ADVERTISING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with detailed study of special topics of importance in public relations and advertising. Students will study the topic of public relations for non-profits in China and abroad.

PRA4023 FINAL YEAR PROJECT (PRA)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4

Course Description: The project allows students to develop an independent, integrated marketing communication plan for an actual client. Under the guidance of a chief adviser, each student generates a client, researches the competitive situation, identifies the target market, and construct a specific part of an integrated marketing communication campaign such as creative, media, public relations, internet marketing, multi-media presentation, or other promotional activities. Students can also choose to conduct an original study, case analysis, or design project on a specific topic in either public relations or advertising.

PRA4033 INTEGRATED MARKETING COMMUNICATION

(3 units)

Pre-requisite(s): PRA2003 PRINCIPLES OF PUBLIC RELATIONS, or
PRA2013 PRINCIPLES OF ADVERTISING

Course Description: This course aims to provide students with an introduction to integrated marketing communications where students will apply many concepts and theories in order to gain a better understanding of how integrated marketing communications works by analysing campaigns and case studies. Concept and theories will help students to understand the actions and decisions influencing the marketing communication mix and its effects on the marketing programs.

PRA4043 ADVERTISING REGULATION AND ETHICS

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 3 or Year 4

Course Description: The field of advertising law and regulation is one of the broadest and most complex areas of study in all of mass communication. Commercial speech is considered quite different from journalistic protections and ensuring the free flow of honest information is a concern of every government worldwide. The ethics of advertising consider internal pressures that practitioners face in trying to maximise their success. When ethics lapse into deception and dishonesty, then the government must initiate legal procedures to protect its citizenry. All of these processes are complicated in that society and technology change constantly and new ethical and regulatory dilemmas arise even as old ones are decided.

PRA4053 PUBLIC RELATIONS AND ADVERTISING INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: Public Relations and Advertising students are encouraged to undertake an internship. The internship is normally of at least two months full-time employment or professional practice during the summer between the second and third years but it can be a minimum of 160 hours of work. Students are required to conform to all reasonable requirements of their internship employer. Both the employer and the student file reports with the PRA programme office after the internship.

PRA4063 PUBLIC RELATIONS AND ADVERTISING STRATEGIC CAMPAIGNS

(3 units)

Pre-requisite(s): PRA2003 PRINCIPLES OF PUBLIC RELATIONS or
PRA2013 PRINCIPLES OF ADVERTISING

Course Description: This course introduces students to the practices associated with planning a campaign. Students working in small groups will prepare a campaign for a real brand or product, service or organisation. The groups will do actual client interview, and write a situation analysis, create detailed references, conduct original research, define and develop targets, develop communication objectives and strategies in advertising and public relations based upon consumer and product research. Deliverables will be created and designed to express the campaign goals and connect and communicate their intentions. Students apply the skills they have acquired in previous advertising and public relations courses to prepare the campaign project. The campaign project, consisting of a written plans book, and original designs and creates will be presented to the class or event clients, and turned in at the end of the semester.

PRA4073 BIG DATA AND ADVERTISING

(3 units)

Pre-requisite(s): None

Course Description: This course is concerned with understanding the fundamentals of big data and its applications in advertising. Students will have an overview of concepts, theories, research, development, and analytics of big data that influences and creates innovative strategies for advertising. Students should be aware of the growing significance of the influence of big data and critically evaluate the dynamic shifts in advertising in a digital era. Data analysis workshops will be conducted for the course.

PRA4083 HUMAN COMPUTER INTERACTION

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce the students to human-computer interaction theories and design processes. The emphasis will be on applied user experience (UX) research and design. The course will present an iterative evaluation centered UX lifecycle and will introduce the students to notions of UX and computer mediated communication (CMC). We will cover a wide spectrum of UX from theories, design, to research and evaluation. In practice and upon the students' graduations, they will be working with a team of engineers, designers, researchers, and marketers to develop user-friendly interfaces to engage, entertain, and retain the consumers.

PRA4093 FINAL YEAR PROJECT (PRA)

(6 units)

Pre-requisite(s): None

Other Condition(s): Year 4

Course Description: The project allows students to develop an independent, integrated marketing communication plan for an actual client. Under the guidance of a chief adviser, each student generates a client, researches the competitive situation, identifies the target market, and construct a specific part of an integrated marketing communication campaign such as creative, media, public relations, internet marketing, multi-media presentation, or other promotional activities. Students can also choose to conduct an original study, case analysis, or design project on a specific topic in either public relations or advertising.

PRA4663 PUBLIC RELATIONS AND ADVERTISING STRATEGIC CAMPAIGNS (FOR MINOR PROGRAMME ONLY)

(3 units)

Pre-requisite(s): PRA2003 PRINCIPLES OF PUBLIC RELATIONS, or
PRA2013 PRINCIPLES OF ADVERTISING

Course Description: This course introduces students to the practices associated with planning a campaign. Students working in small groups will prepare a campaign for a real brand or product, service or organisation. The groups will do actual client interview, and write a situation analysis, create detailed references, conduct original research, define and develop targets, develop communication objectives and strategies in advertising and public relations based upon consumer and product research. Deliverables will be created and designed to express the campaign goals and connect and communicate their intentions. Students apply the skills they have acquired in previous advertising and public relations courses to prepare the campaign project. The campaign project, consisting of a written plans book, and original designs and creates will be presented to the class or event clients, and turned in at the end of the semester.

PSY2003 BIOLOGICAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description: The study of biological psychology has its roots in two disciplines: biology and psychology. The course attempts to link the two and provides an understanding of the methods by which biology is able to clarify and assist the student in understanding human behaviours and processes in our mental lives. Biological psychology will provide immediate, causal explanations for the role of the human brain in guiding and directing behaviour; this, taken in a greater context considers the role of the nervous system, hormones and immediate environment.

PSY2013 RESEARCH METHODS IN PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description: To cultivate critical thinking, and how it can be applied to a wide range of research topics in Psychology. This course will take a practical, skill-building approach to examining the nature of psychological research, the formulation of research

questions, research design and methods, and the analysis, interpretation, and presentation of research data and results. The course will enable the student to become competent in exploring, evaluating, and applying research findings to the wide range of problems in Psychology. It is also designed to help students become more sophisticated consumers of the increasing flood of scientific news, to help them discriminate between junk and serious science. It will also provide a solid methodological foundation for students to undertake their final year projects. At the end of the course, each student should decide on a topic for his/her final year project and develop a preliminary research project proposal. This proposal would form part of the course assessment.

PSY2023 SOCIAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: At the completion of the course the student should have a critical understanding of influence of social –psychological phenomena which occur in our daily lives. The student will develop an awareness of the fact that we sometimes spend entire days in interacting in a variety of different situations which lend themselves to the theories and principles of Social Psychology. The student will be aware of the contributions of social psychologists in the fields of business, medicine law and related areas. Social psychology is now represented as an element in other areas of psychology: clinical, forensic, industrial and organisational. Contributions to these fields flow in from the field of social psychology. Social psychology will give the student an interest and appreciation for cultural diversity and national interest, these areas represent extensive interest in research and experimentation in attempt to determine which are universal and which are cultural bound. Finally, emphasis will be placed on understanding the traditional topics such as aggression, violence, altruism, humanism and other social forces.

PSY2033 DEVELOPMENTAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: Developmental psychology is designed to provide the student with the fundamental knowledge and appreciation of the concepts of human development. The student will begin with the introduction of scientific methods and research models in the area of human development. This will prepare the student to read and understand the evolution and technological advances in the discipline of psychology and particularly, developmental psychology. The student will be introduced to the "bio-psycho-social" model as it applies to human development; this will include relevant cultural and social issues related to the fact that human development is not driven or determined by isolated biological force but expressed as a dynamic between the elements of heredity and environment which shape the human organism.

PSY2043 INTRODUCTION TO PSYCHOLOGY

(3 units)

Pre-requisite(s): None
Course Description: This is an introductory level course designed to provide an understanding of the basic scientific principles supporting the discipline of psychology. The course begins with the historic roots of psychology and the fundamentals of empirical research which will provide the basis of the bio-psycho-social model used throughout the course. The course will cover a wide range of topics beginning with the study of human development which will lead to further discussion of cognition, personality, learning perception, psychopathology and principles of socialisation, etc.

PSY2053 EDUCATIONAL PSYCHOLOGY AND CLASSROOM PRACTICE

(3 units)

Pre-requisite(s): None
Course Description: This course aims to develop understanding of key concepts and theories in educational psychology and their application to the classroom teaching and learning; use key psychological constructs such as learning, motivation, cognitive processes and social construction as the basis for explaining current educational practice; identify and suggest efficient teaching methods, and evaluate the effectiveness of current educational practice.

PSY3003 THEORIES OF HUMAN PERSONALITY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This 3-unit hour course is an examination of the major personality theories, including those proposed by Freud and his followers, learning theorists, trait theorists, social-learning theorists and humanists. Current research into personality, using modern methods, also is reviewed. We will describe and interpret the major theories of human personality, introducing the student to the main ideas and concepts of each theorist and theory, to attempt to understand the role of theory in the study, understanding and explaining of human behaviour. And we will also aim to draw from the related research, pertinent information and analyses of the respective theories and how theories and research can be practically interpreted and applied; to encourage active participation in the curriculum; to enhance skills in critical thinking regarding assessment of subjective areas of human psychology; to overview the major controversies in contributors to Psychology.

PSY3013 THEORIES OF LEARNING

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The course in Theories of Learning attempts to integrate the cognitive, emotional and environmental experiences which form the basis of knowledge, skills and values that determine the individual's view of the world. Theories of learning attempt to explain how these learning events occur and what is happening when people learn. This is what differentiates humans from animals, we know it!! A fundamental question surrounding this fact is how do we know? This is answered by exploring the bases of learning. The course will also provide an introduction to some of the most informative and influential psychological thinking of the twentieth century which explored the nature of learning.
The course is designed to expose the student to important empirical and practical applications of learning. We will study the variables related to learning with the goal of understanding the principles of human development, educational achievements and therapeutic changes.

PSY3023 ABNORMAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course will introduce students to the branch of psychology which deals with a diverse range of maladaptive human behaviours. Topics will include historical and theoretical perspectives on abnormal behaviour, and related methods of assessment, research, and intervention which are prominent in this area of psychology.
This course will also include a detailed coverage of anxiety, stress, mood, thought, substance, personality, sexual, somatoform, and eating disorders, as well as disorders related to childhood and aging. Psychosocial dimension of these disorders will be considered, along with strategies for intervention which represent a variety of theoretical perspectives on treatment.

PSY3033 FORENSIC PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The course in Forensic Psychology is directed at applying social science research methods and principles of psychological knowledge and theories to the contemporary issues of the criminal justice system. The course will introduce the student to a wide range of topics related to legal methods found in court, corrections and police work. The student will be introduced to the translation of psychological language into legal language found in courts and other legal institutions. The fact that a forensic psychologist is not a therapist and does not approach the issues and problems found in clinical psychology will be understood by the student. Emphasis on facts and objective assessment will be a key concept, the forensic psychologist must be acutely aware of his/her role at the behest of the judge or attorney representing the defendant. The student will be exposed to the myriad of situations and circumstances in the relationship between crime and mental illness. Thus the student of Forensic Psychology will understand the concepts of insanity, recidivism, risk assessment, police psychology and expert testimony.

PSY3043 CONSUMER PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The field of consumer psychology refers to the study of how the population accesses the goods and services in their daily lives. This area of psychology draws heavily from the fields of advertising and marketing in the scope of business but it incorporates and complements these disciplines with anthropology, cognitive psychology and social psychology. Consumer Psychology has been recognised as a separate area of study within the discipline of psychology since World War II.
Consumer psychology attempts to answer the questions of how, why, when and where do people buy or, not buy products. Consumer psychology studies individuals and group characteristics regarding how they satisfy their wants and needs. This involves examining demography, economic and social status and the effects of the environment and how it influences buyer decisions. Consumer psychology examines factors related to how a customer determines value; it attempts to measure the effects of advertising and marketing with the ultimate goal of influencing or predicting a customer's decision.

PSY3053 EDUCATIONAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The course in educational psychology is developed to study how humans learn in educational settings. The course explores and examines the effectiveness of educational intervention and the psychology of teaching. The focus of educational psychology is upon how students learn and how they develop, this often takes place within the context of subgroups such as "gifted children" or children with "learning and educational disabilities". Educational psychology locates itself within a wide range of specialties within the areas of educational studies. A course objective is to expose the student to a variety of these areas such as: instructional design, educational technology, curriculum development, special education and classroom management. The broad, overall objective of educational psychology is to introduce the relevant psychological principles, theories and methodologies to problems and issues found in areas of learning and education

PSY3063 PSYCHOLOGY OF CULTURAL DIVERSITY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course is designed to provide students with a positive perception of cultural diversity. The most important elements of cultural diversity, understanding and awareness, will be addressed. The aim of the course is to examine how "the mind shapes culture" and how "culture shapes the mind". We will begin by discussing immigration and cultural diversity from the point of view of those who change cultural environment and those who find themselves in environment where they are minorities. Psychology of Cultural Diversity employs a blend of experiential learning theory to engage the learner in a unique and participative set of learning experiences. Increased awareness of cultural diversity can translate into more tolerance, respect, and appreciation for the uniqueness of all people and culture.

PSY3073 EXPERIMENTAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The major objective is to provide the student with hands on experience and practice related to experimental methods in psychology. This process includes planning, designing and conducting a piece of experimental research and communicating the results to fellow students. Students will be introduced to the basics of scientific methods, principles of observation and reporting. Developing computer skills as a foundation for data analysis will be emphasised.
The laboratory part of the course will provide the research experience, develop the research project and demonstrate the skills of scientific communication in both written and oral forms. The course will also introduce the important topics of research ethics and guidelines established for the protection of animal and human subjects.

PSY3103 POSITIVE PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course will focus on the major empirical findings and theories within the major areas of Positive Psychology. It is designed to explore the concepts, research behind the concepts,

techniques, and exercises that enhance well-being. Through this course students should be able to promote both the original goals of a psychology of well-being (getting rid of negatives and dealing with ordinary challenges), while emphasizing Positive Psychology's focus on growth and excellence. Students will be provided the knowledge to rationalize negative states such as anxiety, depression, low self-esteem, anger, and self-defeating behaviour and taught to deal effectively with the normal demands of everyday life, like having good relationships with others, coping with stress, organizing the self, and accomplishing goals, etc. The students will increase the ability to improve the self beyond mere normality.

PSY3113 NEUROPSYCHOLOGY OF LANGUAGE

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course of Neuropsychology of Language is designed to provide the latest knowledge for students who are interested in the neural bases of language processing including reading, word recognition, speech perception, language comprehension, and writing. The course will orient students to hot topics and presentative studies in the field of language neuroscience. The course will also provide students chances to learn the latest applications of cutting-edge neuroimaging techniques such as MRI and EEG in the research of the neural bases of language processing.

PSY3123 FORENSIC PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The course in Forensic Psychology is directed at applying social science research methods and principles of psychological knowledge and theories to the contemporary issues of the criminal justice system. The course will introduce the student to a wide range of topics related to legal methods found in court, corrections and police work. The student will be introduced to the translation of psychological language into legal language found in courts and other legal institutions. The fact that a forensic psychologist is not a therapist and does not approach the issues and problems found in clinical psychology will be understood by the student. Emphasis on facts and objective assessment will be a key concept, the forensic psychologist must be acutely aware of his/her role at the behest of the judge or attorney representing the defendant. The student will be exposed to the myriad of situations and circumstances in the relationship between crime and mental illness. Thus the student of Forensic Psychology will understand the concepts of insanity, recidivism, risk assessment, police psychology and expert testimony.

PSY3133 HISTORY AND SYSTEMS IN PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course explores major developments ideas in the history and systems of psychology as an academic shaped the field; when and how psychology became a science; life histories of psychologists; and how ideas about what is "normal" are shaped by psychology. Although psychology really only became an independent discipline about 100 years ago, its history goes back much further than that. The purpose of this course is to provide an overview of current methods of psychological intervention, with a strong emphasis on empirically supportive forms of treatment. Students can expect to learn about many widely used cognitive and behavioural methods, psychodynamic theories and methods including psychoanalytical perspectives, humanistic approach of counselling, modern theories and practical issues of positive psychology, self-awareness and well-being.

PSY3143 THE PSYCHOLOGY OF DECISION-MAKING

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course is designed to introduce and interrogate psychological approaches to decision-making. Students taking this course will learn about dynamics affecting their own decisions, and to the decisions made by many other people. As a result, they will learn about how to improve decision-making strategies and even contribute to the growing decision science community.

PSY3183 PSYCHOLOGICAL ASSESSMENT AND TESTING

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The aim of this course is to improve the knowledge, understanding, and practices of students who will be involve in constructing tests, and understanding the meaning and value of test scores. This course introduces students to the psychological tests used in clinical, organisational, forensic, and educational settings. Through the address of topics such as test design, neuropsychological assessment, vocational interests, and projective techniques, students will gain insight to how testing data are used by professional psychologists when working with clients.

PSY3193 ADVANCED DATA ANALYTICS FOR PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2013 RESEARCH METHODS IN PSYCHOLOG
Course Description: This course aims to impart advanced skills and knowledge necessary for the application of diverse quantitative methods within the realm of psychology. The curriculum provides a comprehensive suite of skills and knowledge required to conduct a psychological research project, from data acquisition and processing to analysis and results reporting. Key topics include regression, multivariate analysis, mediation, moderation, foundational structural equation modeling techniques, and data visualization. Students will gain the ability to design and execute their own behavioral research projects utilizing the methodologies taught in the course. The reporting styles introduced will further empower students to effectively illustrate visualization techniques, leading to the production of publication-quality posters and journal articles.

PSY4003 HUMAN COGNITIVE PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The main objective of the course is to provide the student with the understanding and appreciation of the scientific methods and how it applies to the principles of cognitive psychology. Principles and theories of attention, memory, problem solving, comprehension and reasoning provide the core of human cognition and provide a context for other studies related to learning, intelligence and other areas of human behaviour. The student will experience the many avenues of empirical research found in studies of cognition and learn to appreciate the traditional research models

of cognitive psychology (e.g. Reaction times) and how they can be used to interpret mental events. The student will understand the failure of cognition (e.g. Trauma, dementia) and use this information and knowledge to further understand normal cognition. The student will hopefully appreciate the value of cognitive psychology in the context of contemporary issues confronting the discipline of psychology.

PSY4004 FINAL YEAR PROJECT I (PSY)

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The main aim of this course is to guide and empower final year psychology students to initiate, explore, analyse, and complete their research project. The objectives of this course are to provide opportunities for students: (1) to develop their individual critical thinking and research design skills, as well as analytical and intellectual abilities; (2) to apply the formal knowledge and skills gained on the degree programmed, to real, practical psychology research; and (3) to integrate their competencies, so as to better prepare themselves for the transition from the academic to the work situation.

PSY4005 FINAL YEAR PROJECT II (PSY)

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY, and PSY4004 FINAL YEAR PROJECT I (PSY)
Course Description: This course is intended for students who want to carry out more in-depth research in their Final Year Project. Same as Final Year Project I, but it will be restricted to students who have academically performed very well in year 2 and year 3, and in Final Year Project I. Enrolment in this course requires the approval of the Programme Director. Students are required to independently carry out a scientific literature review, to critically appraise certain theories, concepts or beliefs, and to prepare students for a higher degree study.

PSY4013 COUNSELLING PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course intends to provide an overview of the counselling profession. Research in efficacy and assessment will be included in the course to emphasise the scientist-practitioner model. Students will also be informed of the various settings where counselling psychologists can contribute their professional knowledge.

PSY4023 INTERPERSONAL AND GROUP DYNAMICS

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The course in Group Dynamics introduces the student to the stages and processes of groups including the principles of group interaction which will address techniques, leadership and roles. These concepts will be applied as part of an experiential learning process with the student as participants in various group exercises. The object is learning while participating. The student will understand group dynamics within the processes of group development: this includes an assessment or group building phase, the initial phase of group development, the working and transition phases, the final or closure phase. Again, this is a course that incorporates both theoretical and experiential phases of group dynamics. The course does not have an orientation to counselling or industrial/personnel management, the course content and material is developed to provide the student with an understanding of group processes, goals, norms and roles, communication, leadership and cooperation.

PSY4033 SPECIAL TOPIC IN PSYCHOLOGY: HUMAN FACTORS AND ERGONOMICS

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: The content of this course depends on the interests and expertise of the lecturers involved in teaching it, and the needs and interests of the students. It provides an opportunity to explore topics of current relevance and importance.

PSY4043 INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: This course will introduce the major aspects of Industrial and Organisational (I/O) Psychology. Students will learn and apply psychological principles and research methods pertaining to a variety of I/O psychology issues, such as individual factors in selection, placement, job analysis and design, safety and training. Students will examine the role of interpersonal relations, and individual differences in modifying and changing organisations, they will also gain insights to the decision making, group dynamics, leadership, employment law, job satisfaction, work motivation, organisational development and change processes within and between organisations.

PSY4053 HEALTH PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: Students will view health and illness through a bio-psycho-social lens, i.e. understand that physical well-being is the result of complex biological, social, and psychological factors. Students should develop the research skills and confidence necessary to critically examine advice about health they are given. Students will learn about behavioural interventions they could apply in their own life, either with others or themselves; modifying health behaviours, coping with stress or pain, or dealing with illnesses.

PSY4063 PSYCHOLOGY OF THE CHINESE PEOPLE

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY
Course Description: Although the Chinese people constitute more than a quarter of the world's population, the purpose of this course is to summarise and integrate the wealth of data available on their psychological functioning. The purpose of this course is to introduce fundamental concepts from psychology in the different cultural context of Chinese people psychological functioning, to apply such concepts in understanding themselves and behaviours of others.

PSY4073 FOUNDATIONS OF HUMAN DEVELOPMENT AND EDUCATION

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description： This course will provide students the opportunity to construct an overall perspective on development —especially physical, cognitive, social, and personality development—across the lifespan, with a particular focus on the influences of the environment, including education, on these four facets of human development.

PSY4083 INTERPRETATION OF EDUCATIONAL RESEARCH

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description： The purpose of this course is to provide students with the essential knowledge and skill to be both discerning consumers and producers of scientific research in child development and education. This course will give students some training about how to assess research findings critically and their educational values as well as how to conduct a research project yourself. This course will be also useful for those who are interested in writing a Research Qualification Paper (QRP) in preparation to be enrolled in a doctoral program.

PSY4093 ECOLOGICAL PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description: This course is designed to give participants a theoretical understanding of studying perception and action that originated in the works of James and Eleanor Gibson. The implications of Ecological Psychology for how we understand the perceptual process are fairly profound, but the approach is also interesting because of its implications for the rest of psychological theories, changing how participants think of cognition, social interaction, developmental process, etc. A special emphasis will be placed on the realization that perception can do much more than was previously suspected. Issues salient to the design of real-life settings (e.g., classrooms, elderly homes, group homes) or product design (e.g., mobile phones, operation systems, watches) will be covered. Participants will conduct an ecological analysis of real-life settings or design that integrates ecological interventions with other modalities of practical concerns.

PSY4103 COGNITIVE NEUROSCIENCE

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description: This course exposes the students to the neural processes and biological substrates underlying cognition. The course will advance the student beyond the processes of basic cognition into how cognitive functions are produced by the brain. The study of Biological Psychology will draw the student into a number of disciplines up to and including neuroimaging and electrical measurement. The course will introduce areas of computational science as they apply to neurocognition. It is anticipated that the student will develop an advanced understanding of the biological bases of mental activity and human behaviour. The course will also provide the student with current research and theory related to the loss of human cognition: disease, Alzheimer's, Parkinsons, stroke, genetic disorders. This information will be expanded in the form of case presentations.

PSY4113 NEUROIMAGING IN PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY, and PSY2003 BIOLOGICAL PSYCHOLOGY

Course Description: This course of Neuroimaging in Psychology is designed to provide relevant knowledge and skills for students who are interested in neuroimaging research. The course will orient students to hot topics in the field and presentative studies of the application of modern neuroimaging technologies including magnetic resonance imaging (MRI), electroencephalography (EEG), magnetoencephalography (MEG), and near-infrared spectroscopy (NIRS). The course will also provide students chances to learn how to apply the two widely used technologies, MRI and EEG, in a study including experimental design, data collection and analysis, result visualization and interpretation, and manuscript preparation.

PSY4123 COUNSELLING PSYCHOLOGY

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description: This course intends to provide an overview of the counselling profession. Research in efficacy and assessment will be included in the course to emphasise the scientist-practitioner model. Students will also be informed of the various settings where counselling psychologists can contribute their professional knowledge.

PSY4133 INTERPERSONAL AND GROUP DYNAMICS

(3 units)

Pre-requisite(s): PSY2043 INTRODUCTION TO PSYCHOLOGY

Course Description: The course in Group Dynamics introduces the student to the stages and processes of groups including the principles of group interaction which will address techniques, leadership and roles. These concepts will be applied as part of an experiential learning process with the student as participants in various group exercises. The object is learning while participating. The student will understand group dynamics within the processes of group development: this includes an assessment or group building phase, the initial phase of group development, the working and transition phases, the final or closure phase. Again, this is a course that incorporates both theoretical and experiential phases of group dynamics. The course does not have an orientation to counselling or industrial/personnel management, the course content and material is developed to provide the student with an understanding of group processes, goals, norms and roles, communication, leadership and cooperation.

SCIT1023 LABORATORY SAFETY

(1 unit)

Pre-requisite(s): None

Course Description: This course is designed to help students acquire the concepts of laboratory safety, properly use chemicals, biological materials, laboratory apparatus; educate students abide by laboratory safety guidelines to meet the national, college level and programme-specific laboratory regulations and management schemes; train students to identify laboratory concerns and make corrections and use laboratory safety equipment including fire equipment to properly handle laboratory emergency; and reinforce their awareness of the possible risks or hazards involved with

laboratory work and realize that laboratory is generally a safe place to work if safety guidelines are properly followed.

SPAN1013 SPANISH I

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to Spanish language. The aim of this course is to introduce beginners to Spanish language building their linguistic and communicative skills in the four language skills: speaking, reading, writing and listening; basic grammar and pronunciation rules, as well as to enable them to apply communication strategies in the target language. Upon successful completion of this course, students will attain the lower range of competency within the Common European Framework of Reference for languages (CEFR) of Spanish Language (A1.1) in the four language skills: reading, writing, listening, and speaking. Students will also gain a view of Spanish and Latin American cultures and develop "intercultural literacy" at a basic level.

SPAN2003 INTRODUCTION TO SPANISH CULTURES

(3 units)

Pre-requisite(s): None

Course Description: This course goes beyond a bare introduction to Spanish culture. It examines the different cultures of Spain: Catalan, Andalusian, Basque, Galician, Castilian, etc. After a first introduction to the different cultures of Spain, this course will focus on the Spanish Civilisation, understanding civilisation as lifestyle and society. This course has been designed from a comprehensive perspective so that the students will be able to gain an overall view of Spanish cultures in its many diverse expressions.

STAT1013 INTRODUCTION TO PROBABILITY AND STATISTICs

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introduction to some important statistical ideas and their applications. Topics include: basic classical and geometric probability principles, random variables and their probability distributions, covariance and correlation structure, sampling and sampling distribution, confidence interval estimation, hypothesis testing about some basic population parameters like the mean, variance, some basic goodness-of-fit tests like the chi-square test and probability plot for detecting normality, analysis of variance, and multiple regression models with variable selection and forecasting.

STAT1033 FOUNDATIONS OF PROBABILITY THEORY

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I, and
MATH1073 CALCULUS I

Course Description: 1. To introduce basic concepts and techniques of the probability theory. 2. To familiarize students with random variables and various probability distributions. 3. To familiarize students with random vectors and their distributions, and limit theory.

STAT2003 ADVANCED STATISTICS

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I or
MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING

Course Description: This course introduces the basic probability theory and theoretical statistics (probability distributions, estimation and hypothesis test criteria, etc.) so that the students can understand the foundations of general statistical practices and are also well prepared for the advanced subjects like regression analysis, multivariate analysis, and time series forecasting.

STAT2013 REGRESSION ANALYSIS

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I and
MATH1063 LINEAR ALGEBRA II,
or
MATH1003 LINEAR ALGEBRA

Course Description: This course introduces the theory of regression analysis and techniques in data analysis. It will emphasise on recent developments in the regression analysis such as statistical diagnostics and nonlinear regression; and to motivate students to analyse multivariate data with the help of statistical packages such as MATLAB, R or SPSS.

STAT2023 ADVANCED PROBABILITY

(3 units)

Pre-requisite(s): MATH1063 LINEAR ALGEBRA II, and
MATH1083 CALCULUS II

Course Description: The course introduces basic concepts and techniques of measuring theoretic probability, familiarise students with random variable and various probability distributions from the perspective of measuring theoretic probability theory, and introduce some basic stochastic processes, martingales and their applications.

STAT2043 STRUCTURE PROGRAMMING (FOR STAT STUDENTS)

(3 units)

Pre-requisite(s): GCIT1003 IT FOR SUCCESS IN EVERYDAY LIFE AND WORK or
GCIT1013 FOUNDATIONS OF C PROGRAMMING or
GCIT1023 PYTHON PROGRAMMING FOR BEGINNERS

Course Description: This course introduces a methodical approach to programme development, starting from problem formulation and specification, through design of the solution, implementation, and documentation, to evaluation of the solution. The subject matter is taught through a high-level structured programming language. At present, C and MATLAB are used.

STAT2063 PROBABILITY THEORY

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I, and
MATH1083 CALCULUS II

Course Description: 1. To provide an introduction to some important concepts in probability theory. 2. To familiarize students with random variables and various probability distributions. 3. To familiarize students with random vectors and their distributions.

STAT3003 SURVEY SAMPLING

(3 units)

Pre-requisite(s): GCNU1003 SPEAKING OF STATISTICS or GCNU1043 INTRODUCTION TO PROBABILITY AND STATISTICS or GCNU1053 STATISTICS FOR SOCIAL SCIENCE or GCNU1063 BUSINESS STATISTICS or GFQR1001 A JOURNEY WITH DATA or GFQR1013 HANDS ON DATA ANALYTICS FOR EVERYONE or GFQR1023 DATA ANALYTICS FOR BUSINESS or GFQR1033 STATISTICS IN OUR DAILY LIFE

Course Description: Sample survey is a popular means for gauging opinions and views of a target population. It is widely used in many areas including behavioural sciences, biomedical sciences, social research, marketing research, financial and business services, public opinions on government policies, etc. However, improperly conducted surveys or inappropriate analyses of the results could lead to seriously wrong conclusions. This course equips students with a sound understanding of survey operations, sampling methods, questionnaire design and analysis of results.

STAT3013 LIFE CONTINGENCIES

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and STAT1033 FOUNDATIONS OF PROBABILITY THEORY or STAT2023 ADVANCED PROBABILITY

Course Description: 1. To introduce the theory and applications of contingency mathematics in the area of life and health insurance and to extend actuarial functions from single life to multiple life while acquainting students with insurance models including expenses. 2. To formulate methods of determining benefit reserves for insurance products and to introduce useful multiple decrement models.

STAT3023 QUALITY CONTROL – SIX SIGMA

(3 units)

Pre-requisite(s): None

Course Description: In this information age much data are collected, but less often analysed. This course covers methods for gleaning useful information for large data sets. These methods may be used to help improve product marketing, increase operational efficiency and discover new knowledge.

STAT3033 BAYESIAN STATISTICS

(3 units)

Pre-requisite(s): STAT2003 ADVANCED STATISTICS

Course Description: This course will present the relevant theory, methodology and computational techniques of modern Bayesian inference and modelling. The main emphasis of the course will be on how to use the Bayesian thinking, modelling and computation to analyse data with complex structure.

STAT3043 DATA ANALYSIS USING R

(3 units)

Pre-requisite(s): GCNU1003 SPEAKING OF STATISTICS or GCNU1043 INTRODUCTION TO PROBABILITY AND STATISTICS or GCNU1053 STATISTICS FOR SOCIAL SCIENCE or GCNU1063 BUSINESS STATISTICS or GFQR1001 A JOURNEY WITH DATA or GFQR1013 HANDS ON DATA ANALYTICS FOR EVERYONE or GFQR1023 DATA ANALYTICS FOR BUSINESS or GFQR1033 STATISTICS IN OUR DAILY LIFE

Course Description: The course covers computer programming and data analysis in R. The emphasis of the course will be on statistics analysis based on R language. This involves: (1) exploratory data analysis; (2) specification of models to explain the data; (3) estimation and evaluation of models; (4) forecasting from the model.

STAT3073 STATISTICAL COMPUTING

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II or MATH1123 CALCULUS FOR SCIENCE AND ENGINEERING, and COMP1023 FOUNDATIONS OF C PROGRAMMING

Course Description: Computational data analysis is an essential part of modern statistics. Competent statisticians must not just be able to run existing programs, but to understand the principles on which they work. They must also be able to read, modify, and write code, so that they can assemble the computational tools needed to solve their data analysis problems. The aim of this course is to expand students' statistical toolbox through numerical and simulation methods. Additionally, the course will teach students how to approach statistical problems from a computational perspective. They will learn how to set up and run stochastic simulations, how to fit basic statistical models and assess the results, and how to work with and filter large data sets.

STAT3083 APPLIED STATISTICS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and STAT2063 PROBABILITY THEORY or MATH2063 PROBABILITY AND STATISTICS, and COMP1023 FOUNDATIONS OF C PROGRAMMING

Course Description: The aim of this course is to emphasize the application of various statistical methods in real data analysis and expand students' statistical toolbox through numerical and simulation methods. Additionally, the course will teach students how to approach statistical problems from a computational perspective. They will learn how to set up and run stochastic simulations, how to fit basic statistical models and assess the results, and how to work with and filter large data sets.

STAT4003 EXPERIMENTAL DESIGN

(3 units)

Pre-requisite(s): STAT2013 REGRESSION ANALYSIS

Course Description: This course stresses the theory and applications of experimental designs. Various kinds of experimental designs such as factorial design, uniform design and design of computer experiments will be introduced. Statistical analysis and model identification are taught by using a number of real-life examples.

STAT4004 FINAL YEAR PROJECT I (STAT)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing in Statistics Programme

Course Description: Students will undertake an individual project under the supervision of a faculty member and gain the practical experience of applying statistics and mathematics principles and techniques acquired from the course to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project. This course is open to Statistics majors only.

STAT4005 FINAL YEAR PROJECT II (STAT)

(3 units)

Pre-requisite(s): None

Other Condition(s): Year 4 standing in Statistics Programme

Course Description: Students will undertake an individual project under the supervision of a faculty member and gain the practical experience of applying statistics and mathematics principles and techniques acquired from the course to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project. This course is open to Statistics majors only.

STAT4013 MULTIVARIATE ANALYSIS

(3 units)

Pre-requisite(s): MATH1053 LINEAR ALGEBRA I and
MATH1063 LINEAR ALGEBRA II,
or
MATH1003 LINEAR ALGEBRA

Course Description: This course provides an understanding of classical multivariate analysis and modern techniques in data mining which are useful for analysing both designed experiments and observational studies. Real data in social, life, and natural sciences are analysed using statistical packages such as R or MATLAB.

STAT4023 LOSS MODELS

(3 units)

Pre-requisite(s): STAT2003 ADVANCED STATISTICS

Course Description: This course covers basic probability, generating functions, theory of recurrent events, Markov chains and Markov processes. It develops and analyses models for fixed time intervals; covers models for claim severities, models for claim frequencies, aggregate claims models and ruin theory. This course is of interest to advance actuarial science students and statistics students.

STAT4033 STRUCTURAL EQUATION MODELLING

(3 units)

Pre-requisite(s): STAT4013 MULTIVARIATE ANALYSIS

Course Description: This course describes the logic underlying structural equation modelling (SEM) approach, also known as covariance structure analysis, and how SEM approaches relate to techniques like regression, path analysis, and factor analysis. We will analyse the strengths and shortcomings of SEM as compared to alternative methodologies, and explore the various methodologies for analysing structural equation data.

STAT4043 CATEGORICAL DATA ANALYSIS

(3 units)

Pre-requisite(s): STAT2013 REGRESSION ANALYSIS

Course Description: To equip students with statistical methods for analysing categorical data arisen from qualitative response variables which cannot be handled by methods dealing with quantitative response, such as regression and ANOVA. Some computing software, such as SAS, S-PLUS, R or MATLAB, will be used to implement the methods. The learning outcome will be the ability to formulate suitable statistical models for qualitative response variables and to analyse such data with computer software.

STAT4053 SURVIVAL ANALYSIS

(3 units)

Pre-requisite(s): STAT2003 ADVANCED STATISTICS, and
STAT2013 REGRESSION ANALYSIS

Course Description: This course first presents parameterisations of survival distributions, in terms of hazard intensities, which lend themselves to the formulation of parametric models, including regression-type models which relate failure-time distributions to auxiliary biomedical predictors. The special features of truncation or censoring present unique challenges in the formulation of likelihoods and efficient estimation and testing in settings.

STAT4063 TIME SERIES ANALYSIS

(3 units)

Pre-requisite(s): STAT2013 REGRESSION ANALYSIS

Course Description: This course provides students with sophisticated statistical techniques and models for analysing time series data. Using statistical packages, such as R and MATLAB, as computational aid, students will learn to use the models for analysis and forecasting where the distributions of arrival-times and withdrawal-times are unknown and not parametrically modelled. This statistical topic has achieved great prominence in the theoretical statistical literature because it is a particularly good arena for the introduction of techniques of estimating and testing finite-dimensional parameter values – such as a treatment-effectiveness parameter in clinical studies – in the presence of infinite-dimensional unknown parameters. Such problems are referred to as semi-parametric.

STAT4073 DATA MINING

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II and
MATH1063 LINEAR ALGEBRA II,
or
COMP1023 FOUNDATIONS of C PROGRAMMING, or
COMP2013 OBJECT-ORIENTED PROGRAMMING

Course Description: In this information age much data are collected, but less often analysed. This course covers methods for gleaning useful information for large data sets. These methods may be used to help improve product marketing, increase operational efficiency and discover new knowledge.

STAT4093 APPLIED STOCHASTIC PROCESS

(3 units)

Pre-requisite(s): MATH1083 CALCULUS II, and
STAT2003 ADVANCED STATISTICS

Course Description: This course reviews basic probability theory and deals with major stochastic processes including Poisson processes, renewal theory, Markov Chains and continuous-time Markov Chains. Applications to inventory problems, equipment replacement policy and queuing theory are also dealt with through some examples.

STAT4103 INTRODUCTION TO DEEP LEARNING WITH PYTHON

(3 units)

Pre-requisite(s): MATH1073 CALCULUS I, and
STAT2043 STRUCTURED PROGRAMMING (FOR STAT STUDENTS)

Course Description: This course will expose students in upper undergraduate level to deep learning, a key discipline in artificial intelligence, with its core models and algorithms. Tools and applications using these algorithms are introduced to give the students an idea and experience of how they are implemented in Python, the most popular computer language widely used in data-mining, machine learning and artificial intelligence communities. The aim of the course is to reinforce students the basic concepts and intuition behind modern machine learning methodologies as well as a bit more formal understanding of how, why, and when they can be enabled in applications related to pattern recognition and decision making.

STAT4113 NONPARAMETRIC STATISTICS

(3 units)

Pre-requisite(s): STAT2003 ADVANCE STATISTICS

Course Description: Nonparametric statistics includes nonparametric descriptive statistics, statistical models, inference, and statistical tests, and modern nonparametric techniques. The model structure of nonparametric models is not specified a priori but is instead determined from data.

SWSA1003 INTRODUCTION TO SOCIAL WELFARE

(3 units)

Pre-requisite(s): None

Course Description: This course a) introduces students to the scientific field of social welfare by providing elementary insights on as well as elementary theoretical understanding of social welfare and all its key related issues; b) examines the functioning, structures, problems of social welfare systems, as well as the changes occurring within those systems; c) provides students with a compact, comprehensive and integrated understanding of social welfare systems in a comparative perspective.

SWSA1013 INTRODUCTION TO SOCIAL WORK

(3 units)

Pre-requisite(s): None

Course Description: This course orients students to the Social Work profession. It provides students with an overview of the philosophical foundations and basic elements of social work covering such aspects as its purposes, values, sanction, knowledge, and skills. Students will examine the approaches/methods of direct and indirect social work practice; the various fields of social work practice and the types of clientele served as well as the roles and functions of social workers. Field trips and visits to social service agencies may be organised to enable them to gain a better idea of the different agency settings and their services.

SWSA2003 SOCIAL WORK SKILLS

(3 units)

Pre-requisite(s): None

Course Description: This course facilitates students' self-understanding and awareness of their own behaviour and attitude related to the role of a social worker, as well as students' reflection of values and to identify value conflict, if any, in the application of the international Social Work Code of Ethics to practice. The main part of the course concentrates on students' acquisition of basic knowledge and micro skills of social practices with individuals, groups, and community.

SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

(3 units)

Pre-requisite(s): None

Course Description: This course is an introduction to the integrative model as a conceptual framework for the study of social work theory and practice. Student will learn the practice content that encompasses the generic knowledge and skills common to social work practice at micro, mezzo, and macro levels. This content includes the activities of intervention and processes of engaging clients in an appropriate working relationship, identifying issues, problems, needs, resources and assets; collecting and assessing information; and planning for service delivery. Exercises based on case, group, and community studies will be used to help students develop their practical and analytical skills. This course runs concurrently with SWSA2003 Social Work Skills.

SWSA2023 HUMAN DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the study of human adjustments and coping behaviours with references to the various features and characteristics of human development from prenatal stage to death. Students will examine the developmental problems, adjustment difficulties, and changes in human behaviour as a result of interaction of biological, psychological, socio-cultural factors

across lifespan, and their implications for social work practice.

SWSA2033 THEORY AND PRACTICE IN SOCIAL WORK (INDIVIDUAL)

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course devotes to the study, application, and evaluation of the major theoretical models/approaches in social work with individuals and their families. It enables students to grasp and apply the knowledge and skills of the major theories and practice of counselling and psychotherapy covering humanistic, cognitive-behavioural, and family therapies. References to the new developments of counselling theories and approaches to the practice of counselling will also be made. Students will develop their skills through participation in a variety of simulation exercises and case studies.

SWSA2043 SOCIAL PROBLEMS

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the macro-study of major social problems and issues of the contemporary societies with references to the local context such as social deviations, ageism, domestic/family violence, inequality, unemployment, poverty, and certain other emerging issues from a sociological perspective. Students will examine the major theoretical explanations (such as social disorganisation; labelling theory etc.) to the causative factors, and the strategies or approaches by which society seeks to cope with them. Policies on treatment and prevention of the social problems under study will also be discussed.

SWSA2043 SOCIAL PROBLEMS

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the macro-study of major social problems and issues of the contemporary societies with references to the local context such as social deviations, ageism, domestic/family violence, inequality, unemployment, poverty, and certain other emerging issues from a sociological perspective. Students will examine the major theoretical explanations (such as social disorganisation; labelling theory etc.) to the causative factors, and the strategies or approaches by which society seeks to cope with them. Policies on treatment and prevention of the social problems under study will also be discussed.

SWSA2053 SOCIOLOGY AND CHINESE SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course provides an introduction of the scientific field of sociology. It aims to develop a basic understanding of major sociological theories such as social system theory and apply these theories to professional and practical contexts.

SWSA2063 SOCIAL INNOVATION AND SOCIAL ENTERPRISES

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with an overview of the knowledge and current trends in social innovation and social enterprises; to enable students to examine the basic principles in designing and operating social enterprises for social innovation; to investigate how entrepreneurial skills are developed in social enterprises particularly in relation to balancing meeting social needs and business effectiveness and efficiency; and to critically review current approaches and models of social entrepreneurship and social enterprise in local and international contexts.

SWSA3003 THEORY AND PRACTICE IN SOCIAL WORK (GROUP)

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course outlines the purpose and rationale behind social work with groups. Students will examine and evaluate the major theoretical models and practical approaches of social group work. Problems and issues in the application of group work will be analysed. Skills necessary for setting up and running a group in particular the handling of group dynamics will be examined. Students will participate in a variety of simulations exercises to develop their skills.

SWSA3013 SOCIAL WELFARE IN ASIA

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the issue of social welfare in Asia from a wholesome (integrative societal) and comparative perspective. Students will learn the importance of social welfare issues in the context of national development – including political and administrative development, as well as economic, social and cultural development. The course will focus on a number of key countries and the welfare systems in Asia, such as: China, India, Korea, Malaysia, and Singapore.

SWSA3023 SOCIAL WORK AND LAW

(3 units)

Pre-requisite(s): None

Course Description: This course orients students to the course of law in welfare-related areas, and its importance for the welfare state system in particular and the general society at large. It will discuss the basic foundation of law in the field of social work and social welfare. It will examine social welfare legislations concerning the protection of women and children; the physical and mentally disabled; family; labour; and those laws related to social work, social security and social welfare, health and education.

SWSA3033 SOCIAL POLICY

(3 units)

Pre-requisite(s): None

Course Description: This course develops students' understanding of social policy and the relationship between social policy, social welfare and social work in a changing world. It focuses on modern

social policy analysis, taking into account the full scope of social policies available today, and shows how they interact with each other – providing both a strong theoretical and practical point of view in the study of social policy. The course will also discuss and analyse the history and development of the welfare state in international perspective.

SWSA3043 SOCIAL WORK WITH OLDER PEOPLE

(3 units)

Pre-requisite(s): None

Course Description: This course develops and deepens the students' understanding of the processes of human aging through an exploration of relevant social sciences concepts and theories. Students will understand and examine the philosophy and rationale behind different provisions for older people, as well as acquire and develop practical techniques and skills in working with older people at different levels and settings.

SWSA3063 SOCIAL WELFARE IN CHINESE SOCIETIES

(3 units)

Pre-requisite(s): None

Course Description: This course aims at helping students to acquire an overview of the social development of contemporary Chinese societies, to develop an understanding of the institutional structure of modern China, to explore the current welfare issues and challenges, and to examine the actual welfare operation and training of welfare workers.

SWSA3073 HUMAN BEHAVIOUR AND SOCIAL ENVIRONMENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with the knowledge on the reciprocal relationships between human behaviour and social environments. It introduces empirically based theories and knowledge that focus on the interactions between and among individuals, groups, societies, and economic systems. This includes the examination of theories and knowledge of biological, sociological, cultural, psychological development across the life span; the range of social systems in which people live; and the ways social systems promote or deter people in maintaining or achieving health and well-being.

SWSA3083 SOCIAL WORK RESEARCH

(3 units)

Pre-requisite(s): None

Course Description: This course helps students understand the basic principles and limits of scientific inquiry and their relation to the practice of social work and social administration. Students will examine the methods of qualitative and quantitative research design; data analysis and interpretation; as well as the use of statistical procedures and knowledge in social investigations. Students will be oriented to the use of computer/statistical software such as SPSS for data entry and analysis. It will also help students to acquire the practical skills of research through planning and undertaking a small-scale research project that is relevant to social work and social administration practice such as evaluative research, action research, and policy research.

SWSA3093 THEORY AND PRACTICE IN SOCIAL WORK (COMMUNITY)

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course identifies community problems with the active participation of the community people and the priorities of problem solutions using the community participatory approach. It will examine the goals and development of community work as a social work method and theoretical models of community work. The course will identify and analyse issues and problems specific to the practice of community work at the local, Asian context.

SWSA3103 FIELD PRACTICE I

(4 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Co-requisite(s): SWSA3123 INTEGRATIVE SEMINAR I

Course Description: This is a supervised field practice. It enables students to gain understanding of the placement agency's philosophy, function, policy, service delivery, and the social problems in its purview. It also attempts to help students apply social work principles and internalise social work values through direct practice. Students, through direct field-practice, are expected to develop self-awareness and the ability to integrate knowledge with practice with different target groups and a range of problems; and to sharpen assessment and intervention skills as applied to a broad range of social work roles in working with individuals, families, groups and communities.

SWSA3113 END-OF-LIFE CARE

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: (1) Appreciate how human beings, in different religions, cultures, and communities throughout the ages, have responded to grief, illness, bereavement, death, and dying; (2) Address issues related to coping with the subject of dying and bereavement, and caring for the dying; (3) Comprehend the complexities of current legal and ethical issues on death and dying (e.g. advanced directives, euthanasia, suicide, HIV/AIDS, etc.); (4) Provide an opportunity to assess one's personal beliefs, attitudes, values, and fears toward death and dying.

SWSA3123 INTEGRATIVE SEMINAR I

(2 units)

Pre-requisite(s): None

Co-requisite(s): SWSA3103 FIELD PRACTICE I

Course Description: Integrative Seminar I aims at providing students with a comprehensive orientation to fieldwork and community settings. Students are psychologically and professionally prepared to tune into the field situations and embark on direct services. Conducted in the form of workshop, group discussions, simulation exercises and others, this course provides students with the opportunities to discuss, reflect, and integrate what they have learned in both classroom and field settings to direct practice. Students are helped to acquire the academic and professional competence and confidence in their work with

clients/community people in the field.

SWSA3133 MIGRANT WORKERS IN CHINA

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course aims to: review contemporary theories and perspectives for understanding migrant workers with particular reference to the socio-economic context of China; critically examine the discourses on living conditions of migrant workers; describe the service delivery system for migrant workers, its resources and gaps and articulate ways to strengthen services and reduce service gaps

SWSA3143 SOCIAL PLANNING AND DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: 1) introduce students to the scientific field of Social Planning and Development, providing elementary insights on-as well as elementary theoretical understanding of – social planning and social development; (2) introduce basic methods in social planning and social development analysis; (3) provide students with the basic concept and policy solutions proposed by developmental social policy, with regard to social planning and social development studies.

SWSA4003 SOCIAL WORK WITH YOUTH

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course reviews contemporary theories and perspectives for understanding youth with particular reference to the socio-economic and political context of Asia, as well as the discourses on specific dimensions of youth in Asia. This course will further examine and evaluate selected youth services and approaches to youth work with a view to promoting positive changes.

SWSA4013 SOCIAL SECURITY SYSTEMS IN ASIA

(3 units)

Pre-requisite(s): None

Course Description: This course will introduce students to the study of different types and constellations of social security systems, as applied throughout all of Asia. The students will realise the strengths and weaknesses, and current predicaments of social security systems in Asia. Students will be able to provide improvements and alternative solutions for current social security problems (e.g. aging of society, impact of economic globalisation, new gender roles, and low birth rates) in different institutional settings.

SWSA4023 OLD-AGE SECURITY IN AGING SOCIETIES

(3 units)

Pre-requisite(s): None

Course Description: This course introduces in particular the issue of old-age security in aging societies and the issue of low fertility rates in the context of financial stability of social security systems. It examines and analyses complexities of multi-pillar old-age security systems in times of rapid aging and rapid and lasting fertility decline, particularly in Western, but also Asian societies. The course introduces old and new concepts and theories of providing old-age security and in devising social policies for the elderly.

SWSA4033 HEALTH AND LONG-TERM CARE IN AGING SOCIETIES

(3 units)

Pre-requisite(s): None

Course Description: This course introduces in particular the issue of health and long-term care in aging societies and the issue of longevity and the rise of modern mass diseases. It will examine and analyse issues of health care markets. The course introduces old and new concepts and theories of providing health and long-term care services, and devising health and long-term care policies for the elderly.

SWSA4043 RESIDENTIAL CARE AND SERVICES

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course provides students with a comprehensive knowledge of the services and practice of residential care. Students will examine the basic principles and characteristics of residential care; and the effects of residential care on both the residents and staff. The roles and functions of social workers in residential settings will be discussed this course will devote to the study of the process and tasks of residential care. The concepts of therapeutic community and community care versus long-term residential care will be analysed.

SWSA4053 SOCIAL WORK WITH FAMILIES

(3 units)

Pre-requisite(s): SWSA2033 THEORY AND PRACTICE IN SOCIAL WORK (INDIVIDUAL)

Course Description: Building on the foundation of theoretical knowledge and practical skills as acquired from the earlier micro social work practice subjects, students will examine the application of the theories and practise in working with families. This course devotes also to the study of the structures, functions, and the developmental stages of families and problems they may encounter. The role of social workers in family services will be examined, and the family policies and services will be analysed with particular reference to the local context.

SWSA4063 TOPICS IN SOCIAL POLICY AND SOCIAL ADMINISTRATION

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to be flexible to allow analyses and discussions on a range of selected contemporary issues in Social Policy and Social Administration, which are complementary to those ordinarily offered as an integral part of the stream. Normally, no more than one such course will be offered in any given semester.

SWSA4073 REHABILITATION SERVICE AND SOCIAL WORK

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course provides students with an understanding of the theories, scope, and causes of physical and mental disorders. The different aspects of needs, problems, and adjustment of both groups of handicapped persons will be examined. Students will understand the methods of assessment, intervention, and prevention of mental and/or physical disability. The roles of the social worker and approaches in working with both clients and their families will also be examined.

SWSA4083 HUMAN SERVICE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides a basic understanding of social welfare management and administration. It discusses the problems, roles and tasks of social workers in human service management particularly those related to the social work settings. The course comprises both macro-management practices (e.g. the shaping of organisational structure and processes of social welfare agencies) and micro-management practice (entrepreneurship, strategic planning, human resource and financial management, social marketing, fundraising, quality control, etc.).

SWSA4093 FINAL YEAR PROJECT (SWSA)

(3 units)

Pre-requisite(s): SWSA3083 SOCIAL WORK RESEARCH

Course Description: The Final Year Project enables students to appreciate and utilise relevant literature and research within their discipline to engage in a study of an issue or problem according to his/her interest. Under faculty member's supervision, individual student is helped to apply and integrate knowledge and fieldwork experiences in his/her study. Students are encouraged to prepare the project at the start of their final year of study.

SWSA4103 FIELD PRACTICE II

(5 units)

Pre-requisite(s): SWSA3103 FIELD PRACTICE I

Co-requisite(s): SWSA4133 INTEGRATIVE SEMINAR II

Course Description: The field practice provides students with hand-on experience. It enables them to understand the agency's philosophy, function, policy, service delivery, and the social problems in its purview; to sharpen assessment and intervention skills as applied to a broad range of social work roles in working with individuals, families, groups and communalities; to develop the ability in applying and integrating classroom learning and field practice with different target groups and a range of problems; and to apply social work principles and internalise social work values through direct practice.

SWSA4113 DISASTERS AND SOCIAL WORK

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: As natural and urban disasters have occurred increasingly frequently in the past decades, greater attention has been devoted to the lack of preparation among social workers to intervene effectively and offer help to survivors of these disasters. The aims of this course are to increase knowledge of different types of disasters ranging from personal disasters and to enhance understanding of the social and psychological impact, and also students will obtain knowledge of selected intervention models/approaches for effective assessment and intervention with individuals and their families affected by disasters.

SWSA4123 DRUG ABUSE AND SOCIAL WORK

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: This course aims to: (1) obtain knowledge of the definition, types and prevalence of drug abuse; (2) increase knowledge of various drug abuse treatment intervention models and techniques for individuals, groups, and families; (3) develop skills appropriate for work with individuals and their families including those of various cultural and socio-economic backgrounds.

SWSA4133 INTEGRATIVE SEMINAR II

(1 unit)

Pre-requisite(s): SWSA3123 INTEGRATIVE SEMINAR I

Co-requisite(s): SWSA4103 FIELD PRACTICE II

Course Description: Integrative Seminar II aims at providing students with a comprehensive orientation to fieldwork and community settings. Students are psychologically and professionally prepared to tune into the field situations and embark on direct services. Conducted in the form of workshop, group discussions, simulation exercises and others, this course provides students with the opportunities to discuss, reflect, and integrate what they have learned in both classroom and field settings to direct practice. Students are helped to acquire the academic and professional competence and confidence in their work with clients/community people, and practise social work independently in the field.

SWSA4143 MENTAL HEALTH AND SOCIAL WORK

(3 units)

Pre-requisite(s): None

Course Description: This course aims (1) to gain an overview of mental disorders and mental health practice; and (2) have working knowledge of practice models that have been identified as essential for effective interventions with people having mental health problems; (3) To instil service delivery ethics, recognition of ethical issues and dilemmas, and ethical decision-making in mental health practice.

SWSA4153 OCCUPATIONAL SOCIAL WORK

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: Occupational Social Work, formerly known as Industrial Social Work, which offers social work services in occupational settings, serves both developmental and social security purposes. The aims of this course are: (1) to enhance students' understanding of the social and psychological situations of general workers, particularly migrant workers from other provinces; (2) to enable students to develop a thorough understanding of the theories of Organisational Behaviour, Functional community work, Crisis Intervention, and Positive Psychology; (3) to become familiar with social work practice competencies that have been identified as essential interventions in different occupational settings; and sharpen students' intervention skills in selecting contact points, establishing service locales, employing major social work methods, conducting social and psychological assessments, developing referral protocols and conducting service evaluations in industry.

SWSA4163 SOCIAL WORK IN HEALTH CARE

(3 units)

Pre-requisite(s): SWSA2003 SOCIAL WORK SKILLS, and SWSA2013 SOCIAL WORK INTERVENTION AND PROCESSES

Course Description: The aims of this course are: (1) to increase knowledge of the mental, emotional and social dimensions that contribute to, and interplay with, physical health and illness experiences; (2) to enhance students' understanding of current policies that influence the delivery of healthcare and the barriers that confront individuals and families affected by illness and disability; (3) To explore selected theoretical approaches that are known to be effective in healthcare practice with individuals and families; (4) to acquire practice skills and techniques appropriate for effective assessment and intervention with individuals and their families in a variety of healthcare settings.

TAP1003 CLASSIC DRAMATIC LITERATURE

(3 units)

Pre-requisite(s): None

Course Description: This is one of the foundational course for students who want to acquire the basic and systematic knowledge about theatre literature. It is also one of the foundational courses for liberal arts. Students are expected to learn the basic history of drama literature in an approach of detailed text analysing. By studying this course, students will gain an in-depth understanding of the basic classic drama texts, as well as the related history of drama art, social history, and material condition. These texts come from literary giants such as ancient Greek drama, Shakespeare, Moliere, Ibsen, Eugene O'Neill, Beckett, etc.

TAP2003 SURVEY TO THEATRE AND PERFORMANCE

(3 units)

Pre-requisite(s): None

Course Description: This is an introductory course designed to give student an overview of the theatre and performance. This overview will include the nature and purpose of theatre, and the practice of theatre. The course provides a general background in theatre history and criticism. The course will look intensively into theatre histories and sample plays, production styles, and personalities from ancient Greece to contemporary theatre from different cultural traditions. Units of study include Greco-Roman drama, medieval drama, Renaissance theatre, neoclassic, and Romantic styles, etc. The course also facilitates appreciation of various period styles in theatre so it acquaints students with the contributions of period playwrights and theatre personalities. It also acquaints students with the past and present contexts and significances of these styles.

TAP2013 AESTHETICS OF THEATRE AND PERFORMANCE

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide an extensive theoretical framework of theatre and performance that puts emphasis on the practical sense of theatrical and performative aesthetic in the industries. Students will have in-depth knowledge on the overarching debate that shapes the theatre we see today and on a broader level, how these debates play pivotal roles to shape several aspects of our contemporary cultural life.

TAP2023 PERFORMANCE DESIGN: SET, LIGHT, SOUND

(3 units)

Pre-requisite(s): None

Course Description: This course is the parallel design course being the complement to another design course *Performance design, costume and props*. This course is designed to provide the basic knowledge, art history and general skill set of the primary visual and audio element other than actors for different types of live genres. By visual it means set design and light design, while audio element means sound and music design for stage and other performance occasions. The goal of this course is to introduce the students to the complexities of setting design, lighting design and sound design from conception to execution. The intent is to make the students to have more than a basic understanding of the contribution that these approaches of design thinking and practices make to a production.

TAP2033 PERFORMANCE DESIGN: COSTUME AND PROPS

(3 units)

Pre-requisite(s): None

Course Description: This course is the parallel design course being the complement to another design course *Performance design, set, light, sound*. It provides an introduction to the principles, elements and practicalities of costume design and prop design, and their relation to general visual design in the Theatre. The students will start from the knowledge and training of art history of fabric art, followed by anthropological approaches of costumes and props, both as tools for performance and aesthetic auxiliary elements. The student will learn how to communicate design choices both visually and verbally through rendering techniques and research.

TAP3003 ADVANCED ACTING TRAINING

(3 units)

Pre-requisite(s): CTV2083 FUNDAMENTALS OF ACTING

Course Description: This course gives the extensive and advanced training on acting skills so the students acquire the ability to work in the most professional contexts demanding representational performance techniques in different styles and genres. Equipped

with the basic knowledge and skills learned in the course fundamentals of acting, in this successive course will further the bodily investigation on the art of acting. The training systems include advanced Stanislavski method, Suzuki method, Meyerhold bio mechanic etudes, Grotowskian method, Michael Chekov method, Viewpoints, Stage Combat, virtual acting and Rasa box. Among these training regimes, this course will take Michael Chekov method as the supportive framework so the students gain the high standard acting techniques that demonstrate excellent taste, skills, inspiration, creativity, professional work ethic, and most importantly, aesthetic authenticity. The course also covers certain content required by other disciplines demanding acting skills other than theatre, for example, TV/Film/internet/VR, via the special blocks dealing with these issues. At the latter stage of the course, students are required to temp up and making relatively complex (yet less complex than final projects) theatre productions of conventional mainstream theatre to practice what have been learned in both fundamentals of acting and this course.

TAP3013 DIRECTING AND PRODUCING: ADVANCE THEATRE MAKING

(3 units)

Pre-requisite(s): None

Course Description: This course explores the process of directing and producing plays for the stage. For directing, studio exercises develop skills in key areas: interpretation of form and artistic intent; perception and sensibility in rehearsal; effective communication with actors; and balancing the interplay between action and text. Students stage scenes from distinct categories: plays in verse, realistic plays, and non-realistic or less literal modern and contemporary plays. Special emphasis is placed on the role of dramaturgical understanding in the creation of meaningful stage action. These practice on the essential tools of directing will be conducted with an emphasis on pre-rehearsal process, rehearsal techniques and presentation. Points covered will include, but not be limited to: building the director's vocabulary, the germination point, pre-production homework, design, text prep, unifying theme, creating a safe space, and the many roles of a director. Since acting and directing are inextricably related disciplines, directing course is scheduled at the same time with certain acting courses in order to provide mutually beneficial training opportunities for both acting and directing students. At times the directing and acting classes will be held separately, but frequently they will be brought together to experiment with mutually challenging director/actor, collaborative exercises. Simultaneous scheduling provides both the acting and directing students of both courses with a highly practical, experientially based, learning laboratory. Structured in a workshop format, the intent of directing is to study the principles, procedures, and practices of stage direction. Beginning with a non-verbal approach to composition and movement study, and progressing to more formal text work, the various exercises culminate in the direction of a ten-minute play for public performance. Meanwhile, producing knowledge of budget and management, will be practiced during the course production in teams.

TAP3023 PLAYWRIGHTING AND DRAMATURGY

(3 units)

Pre-requisite(s): None

Course Description: The goal of the course is to write an original play and explore fundamental tools of playwriting for theatre, film and TV series. Students will also be trained to work as a dramaturge working for theatre or in contemporary arts. Every week students will bring in found texts such as a newspaper clipping or Internet article that holds the potential for a future play, character, theme, or play location. Final play readings will occur on the last two sessions of the course. Delving into two – three plays from the classical canon, the course will begin with basic analysis of the text—action, character, structure, theme, motif—and then investigate historical, socio-political, and theoretical contexts. Focus will be given to applying analysis and research to performance. Class periods will involve active class discussion, small group discussion, creative in-class projects, and written assignments. Preparation time outside of class will be required and will include reading and research. The primary goal of the course is to encourage students to write quickly, fluidly, and fearlessly. Students will write one 10 minutes play (approximately 10 pages) each week, or a 10 pages scene which will be outlined in an assignment. The course will introduce the traditional approach to theatre which is rooted in character and narrative structure, with emphasis on a play's arc through its beginning, turning point, and ending. In class exercises are designed to circumvent students' first lines of defence, to silence the negative editor voice, to experience trusting first instincts, and to encourage students to write both visually and concretely. Each week's assignment will introduce another element of craft, including high and low context dialogue, revealing action, the power of the unspoken word, disrupted ritual, etc. Then the course will deal with the matter that how to transmit these skills of play writing to other disciplines such as film script, experimental script, on site dramaturgy etc.

TAP3033 SITE-SPECIFIC THEATRE AND PERFORMANCE

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to provide an introduction to the basic theory and practice of site-specific theatre and performance. Students will gain skills in creating shows and performing them live outside of designated theatre spaces. They will learn how to choose and analyse sites then go onto how to research them both in situ and remotely. Students will learn how to apply their research to artistic creation, making their own performances in response to sites around the campus. They will learn several ways to engage with audience, laying the framework for immersive theatre production. Students will work collaboratively both during in-class exercises and through creating group performances. They will acquire a solid basis to further investigate site-specific arts projects across a range of disciplines.

TAP4003 POST-DRAMATIC THEATRE AND DIGITAL PERFORMANCE MAKING

(3 units)

Pre-requisite(s): None

Course Description: This course explores the concept and vocabulary of postdramatic theatre from a pedagogical perspective. This course also provides the opportunity to experiment, to explore, to be different and to be innovative. Students will be exposed to the most heated debates in academic and practical world. The course will adopt Practice as Research as primary pedagogical method that try to balance the practical technique, the aesthetic necessity, the critical thinking and the theoretical reflection. Given the exhaustive purview of new theatre/performance around the globe, the course

identifies some of the major anxieties and paradoxes generated by teaching postdramatic theatre through practice, with reference to the aesthetic, cultural and institutional pressures that shape teaching practices. It also presents a series of case studies that identify the pedagogical fault lines that expose the power-relations inherent in teaching (with a focus on the higher education sector as opposed to actor training institutions). It uses auto-ethnography, performance analysis and critical theory to assist students involved in directing theatre productions to deepen their understanding of the concept of postdramatic theatre. Then the second part of the course investigates digital media practices at the intersection of virtual and embodied experience, exploring overlapping genres of play, performance, pedagogy, and participatory culture. Topics include digital games, viral videos, popular music circulation, online music and dance lessons, surveillance, interface theory, and the performative aspects of virtual communities. Theoretical approaches draw on scholarship in performance studies, media studies, ethnomusicology, human-computer interaction studies, gender studies, and critical race theory. Equal attention will be given to production, circulation, and reception practices, and consider their contemporary convergence. The course requires critical engagement with a diverse range of media, genres, and cultural contexts, encouraging students to examine and develop their own media practices.

TAP4013 COMPOSITION PRACTICUM AND FINAL PROJECTS

(3 units)

Pre-requisite(s): None

Course Description: This course brings all the skill sets, technique, aesthetic sensibilities, theoretical and embodied knowledge acquired in other previous courses. The goal of the composition practicum is to develop student's practical abilities to stage vivid, moving, meaningful works of theatre. The course will try to conduct the whole procedure similar to real situation as much as possible so the students could gain capacity to survive the first few years in industries as theatre/performance/film professionals. Through structured exercises, scene work, guest artist workshops, and critical analysis of productions with real production and real audience, the practicum seeks to engage the students individually and as a college of directors in an intensive and practical investigation of the art of acting, directing, producing or generally speaking, theatre and performance making. Whether students see themselves primarily as a director/interpreter of text, or as an originating author in any other sense, i.e. as a primary source of new works for the theatre, the course asks students work out collaborative projects that finalising the procedure of undergraduate investigations. Composition here conveys the double sense that both as an editing technique of a performing art and as a final touch to demonstrate the students have mastered the art of defining an artistic problem and designing the practical tasks to move them and their collaborators towards the most creative, engaging theatrical solution possible.

TEM2003 INTRODUCTION TO HOSPITALITY AND TOURISM

(3 units)

Pre-requisite(s): None

Course Description: This course is intended to provide students with comprehensive overview of hospitality industry. At the completion of this course, student will understand the major concepts and issues on hospitality industry; will grasp the key components of each sector of the hospitality industry and how they interrelate; will access various career options in the hospitality industry; will apply the contents of the course to an actual on-going hospitality setting.

TEM3003 LEISURE AND SOCIETY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a broad understanding of the evolution of leisure values, behaviours, and services as well as contemporary issues and trends of leisure service. Students will learn about the theories and practices of recreation and leisure in an international context, and the role of organized leisure in Chinese communities, changing social, economic, political and environmental contexts of leisure and its ties to the fields of hospitality.

TEM3013 INTRODUCTION TO ENTERTAINMENT BUSINESS

(3 units)

Pre-requisite(s): None

Course Description: This course is to introduce students to the concepts, analyses, and activities that comprise global entertainment business, and to provide practice in assessing and solving related business problems in entertainment industry. This course provides students with unique learning opportunities to gain insight into various issues within the entertainment industry. As such, the course provides a balanced approach to business and entertainment, providing a value-added, "real world" education in the management of entertainment products with a considerable focus on customer or user experience.

TEM3023 CLUB MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to be a basic introduction to the club segment of the hospitality industry. It aims to provide comprehensive compilation of concepts and practical subject matters for club management emphasizing effective and efficient operations, which contribute to membership satisfaction. Specific areas of emphasis will include how and why this industry segment exists, the importance of providing member benefits and maintaining the club assets, and club recreational activities and amenities. Students are able to evaluate how changes in the economy, demographics, and societal norms impact club operations and how these changes affect club operation.

TEM3033 RESORT MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of resort management and operations. The scope of these industries will be discussed along with the principles of successful marketing, management, and development of a resort. This course will introduce students to the operations of modern day resorts, expansion of resorts worldwide, and their operations and characteristics. Students will gain exposure to the wide range and high level of services and activities expected by resort guests and offered by today's resorts.

TEM4013 SUSTAINABLE TOURISM

(3 units)

Pre-requisite(s): None

Course Description: This course is intended to provide students with comprehensive overview of sustainable tourism. At the completion of this course, students will understand the major concepts and issues in sustainability; will grasp the key components of each aspect of sustainability in tourism and how they interrelate; will access various career options in the tourism and hospitality industry; will apply the contents of the course to an actual on-going hospitality setting.

THEM2003 THEME PARKS AND ATTRACTIONS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is to examine & analyse the nature, characteristics, and the problems/ issues of the theme park & attractions industry, to prepare and/or evaluate a theme parks/attractions plan or project, and to analyse and evaluate how a theme park/attraction is managed and operated.

THEM2023 SPORTS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course is to introduce students to the concepts, analyses, and activities that comprise global sports, and to provide students with unique learning opportunities to gain insight into various issues within sports. Upon completion of the course, students will have basic knowledge and skills of managing sports and better understand the rapidly growing sport management field.

THEM2033 FOOD AND BEVERAGE MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is twofold: first, we will focus on contemporary challenges that managers and entrepreneurs in food and beverage businesses should be able to face; and second, we will implement appropriate courses of action to satisfy customers and build an advantage over the competition.

THEM2043 FUNDAMENTALS OF TOURISM AND HOSPITALITY STUDIES

(3 units)

Pre-requisite(s): None

Course Description: This course covers the basic and fundamental concepts and theories of tourism and hospitality studies. It also provides an overview of the business features of various tourism service suppliers, current issues, real-life problems, and technological applications in the tourism and hospitality industry. The students will appreciate the various career and business options in the tourism and hospitality industry.

THEM3003 INTERCULTURAL MANAGEMENT IN TOURISM AND HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: Tourists and hotel guests travel to and from all corners of the globe and naturally all deserve to be treated in accordance with their own cultural needs and prerequisites. This course in intercultural management compares management and communications processes in a cross-cultural context and emphasizes practical cultural (as well as geographic) differences and how history (of the individual, group, and organization) may affect behavior. This module will address the divergence of management in the hospitality and tourist sectors across the world, leading students to understand how management is approached differently in different areas.

THEM3013 BIG DATA ANALYTICS IN TOURISM AND HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: This subject is designed to provide students with the fundamental concepts and practical applications of big data analytics in the tourism and hospitality industry. This course will emphasize how to understand, analyse and articulate data analytics as well as produce original insights from big data applications. Students will perform a variety of analytical practices using a big data programming to have hands-on experience. Upon completion of the subject, students will be able to obtain comprehensive understandings of big data analytics for facilitating better business decision-making process.

THEM3023 SMART TOURISM DEVELOPMENT

(3 units)

Pre-requisite(s): None

Course Description: Technology has become the catalyst and prime condition for success in the international hospitality and leisure industry. The era where the historical sites or the privileged location of a destination was, by itself, enough for attracting tourists has gone, giving the flow to those destinations that are able to offer the visitors new and enhanced experiences, and to those that benefit from comparative advantages by adding extra value through innovative services linked to technology and data, sustainability, and accessibility. Smart tourism will be the global change agent and value driver, transforming both the guest experience, as well as the operational deliverables, of extremely successful tourism, hospitality, and event organizations.

THEM3033 HUMAN RESOURCES MANAGEMENT IN TOURISM AND HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: Human resource managers oversee the recruiting, interviewing and hiring of staff and serve as the bridge between management and employees. In the hospitality industry, HR must not only cultivate a skilled and dedicated talent pool but also retain it in a demanding job field. HR looks to attract, motivate and place employees in the best-fitting positions. When employees are happy and motivated, they provide the desired level of customer service required for the business's success. HR in the hospitality industry plays an essential role: HR keeps employees happy so that they maintain the excellent reputation of the business and keeps customers happy by ensuring employees behave appropriately and according to company policy

THEM3043 DIGITAL MARKETING IN TOURISM AND

HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: The Internet, the digital revolution, and the move towards an information-based economy are dramatically changing business and the way products are marketed and sold. To be more successful in this "new marketing world," business people need to understand what is changing and how to use the new tools to their optimal advantage. This course is for those who want to understand the new tools available through the Internet and those who are comfortable with Internet applications and the digital world but want to learn the marketing fundamentals as they apply to the Internet.

THEM3053 TOURISM, HOSPITALITY AND EVENT MANAGEMENT INTERNSHIP

(3 units)

Pre-requisite(s): None

Course Description: The aims of the internship are to provide a direct link between the academic core of the course and the disciplines and methods of practice; to enable students to experience aspects of practice and provide the opportunity for them to work in areas of the field outside their specific expertise; to enable students to observe, analyse and comment on the interaction between theoretical and practical issues as it is practiced, and to establish connections between practice and the development of relevant research programs and suggest appropriate research directions so as to improve the complementarities of theory to practice.

THEM3063 CYBER SECURITY IN TOURISM AND HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: This course is designed to guide future practitioners how to engage all functional levels within the enterprise to deliver information system security within cyber context. This course will provide a basic introduction to of all aspects of cyber-security including business, policy and procedures, communications security, network security, security management, legal issues, political issues, and technical issues. This serves as the introduction to the cyber security track in both the tourism and hospitality industry.

THEM3073 MEETINGS, INCENTIVES, CONFERENCES AND EVENTS MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course gives students an overview of the MICE (Meetings, Incentive, Conventions and Events/Exhibitions) sector of the tourism industry. Students will understand the managerial and operational aspects pertaining to MICE industry. The purpose of this course is to acquire an in depth knowledge about the specialized field of "MICE industry" and to become familiar with management techniques and strategies required for successful planning, promotion, implementation and evaluation of special events within a MICE context.

THEM3083 INNOVATION IN DESIGN AND TECHNOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to acquaint students with the connecting design and technology through the interdisciplinary knowledge in applied innovation. It also engages students with the increasing significance of design thinking skills in the context of service design industries. Students will be able to demonstrate their knowledge of applying discover, define, refine and build concepts in solving the demand driven customer needs in the changing services industries. Upon completion of the course, student will present a service design solution by innovative solution for a service brand or tourism activities.

THEM3093 FOOD AND BEVERAGE OUTLET DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course introduces students to the nature and characteristics of food and beverage outlets design. A coverage of an integrated approach to restaurant design, incorporating front- and back-of-the-house operations. Restaurant design plays a critical role in attracting and retaining customers. Simultaneously, design must facilitate food preparation and service. Successful Restaurant Design shows how to incorporate your understanding of the restaurant's front- and back-of-the-house operations into a design that meets the needs of the restaurant's owners, staff, and clientele. Moreover, students will be able to understand the restaurant's concept, market, and menu in order to create a design that not only facilitates a seamless operation but also enhances the food and beverage experience in restaurant and bar management.

THEM3103 HISTORY OF MODERN TOURISM

(3 units)

Pre-requisite(s): None

Course Description: As the world’s largest single industry, tourism has become a most powerful economic and social factor at the turn of the 21stcentury. But by now, the practice of travel and tourism is also recognized as a highly influential cultural force. In the modern world, travel and tourism have become fundamental social and cultural practices by means of which people construct ideas about the self, society, nation, the past and others. Studying the practice and discourse of travel means to deal with a symbolic representation of the world, with an experience of a fictional environment, just like art, ritual, and literature. This would imply that travel and tourism do not primarily constitute a flight from reality, but rather symbolic ways to understand and negotiate it. The course is not about the experience and practice of travel as such, let alone focused on tourism studies, but has a strong concentration on social and cultural change in a historical perspective. It deals broadly with European, American, and Chinese perspectives.

THEM3113 TOURISM DEVELOPMENT PLANNING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students a macro-view of how the development of tourism and hospitality industry should be planned for a country or a tourist destination. This course discusses the theories, concepts, issues, tools and techniques of tourism planning, and the possible tourism impacts.

The students will gain a comprehensive understanding on planning the growth of the tourism and hospitality industry; how the key stakeholders in different sectors, such as transportation, hotel, attraction, travel intermediate, etc., are managed and interrelated in the process of tourism development; and what tourism impacts might be resulted from the industry growth and actions to mitigate the impacts.

THEM3123 GUEST EXPERIENCE MANAGEMENT AND STRATEGY

(3 units)

Pre-requisite(s): None

Course Description: This course discusses service management, strategy and planning from the guest perspective. It aims to discuss the key theories, concepts, knowledge, and skills needed to provide guests with a high-quality customer experience, which is an ever-prevalent component in the tourism and hospitality sector. The students will gain insights about the meaning, culture, environmental setting, and delivery system of guest experience. The students will learn ways to measure service quality, plan guest experience strategically as well as manage service failure.

THEM3133 HOTEL OPERATIONS AND MANAGEMENT

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of hotel management from the hotel general manager perspective. It discusses the key theories, concepts, knowledge, and skills needed to operate various departments of a full-service hotel. The students will gain insights into the operations and management of human resources, front office, housekeeping, food and beverage, sales and marketing, facility management, franchising and contract, etc. in a global environment.

THEM3143 HOSPITALITY INDUSTRY FINANCIAL ANALYSIS

(3 units)

Pre-requisite(s): None

Course Description: This course provides a basic understanding of financial analysis, hotel operation statements, and other financial tools used by hospitality management. The focus is from an insider's view of the hospitality operations. Through these tools, students will learn how to analyze and interpret operating numbers, evaluate the operations of hospitality businesses in accordance with the Uniform System of Accounts for Lodging Industry (USALI). This course also provides a basic understanding of how financial analysis is applied to optimize resources and revenues streams, and cost control across all departments and functions with the purpose of achieving the company`s strategy and marketing positioning.

THEM4003 STRATEGIC MANAGEMENT IN TOURISM AND HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: This course provides a more in-depth knowledge of various strategic management theories and their application in general as well as within organizations in the tourism and hospitality sector. It examines the application of tourism and hospitality strategic management concepts and practice to the operation of key organizations. It aims to provide students with advanced skills and knowledge necessary for swift critical analysis and sound managerial decision-making in the context of the challenges in these exciting, rapidly expanding industries. Both micro perspectives and macro perspectives of strategic management will be discussed during the course.

THEM4013 FINAL YEAR PROJECT (THEM)

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the analysis of business issues or problems on tourism and hospitality management and the use of scientific research as a problem-solving tool for students: (1) to encompass the understanding and application of appropriate research designs; (2) to apply research data or statistics gained from tourism, hospitality, or related industries; and (3) to equip students for their future workplaces with key research concepts, methodologies, data analysis, report writing and both oral and written presentation skills.

THEM4023 HOTEL INFORMATION SYSTEMS

(3 units)

Pre-requisite(s): None

Course Description: This course enables students to understand the connection between the business and Information Technology (IT) and Information System (IS) in hotels. This course gives the student basic knowledge on the role of business information system, the advantages of the information system, the development and management of business information system. Besides information system, students are introduced with current information technology and it future, which affect the design and management of the new information system within hotel context. The focus of this course is to provide to students the opportunity to first of all understand the impact of MIS in an organization or a hotel company.

THEM4033 RESEARCH METHODS IN TOURISM, HOSPITALITY AND EVENT

(3 units)

Pre-requisite(s): None

Course Description: This course aims to get the students armed with a collection of research methods that are commonly used in the tourism and hospitality studies. The students will learn about the knowledge and skills required to conduct research studies, both qualitatively and quantitatively, in an ethical way. They will also develop competency of analyzing both qualitative and quantitative data, and compiling research outputs in a coherent and value-adding manner.

THEM4043 DESIGN THINKING IN TOURISM AND HOSPITALITY

(3 units)

Pre-requisite(s): None

Course Description: This course provides an overview of design thinking and how it can be applied to the tourism and hospitality industry. This course will introduce the theories, skills, and steps of a customer-centered approach to innovate tourism and hospitality services and products by integrating what is desirable from a customer perspective, what is technologically feasible, and economically viable. The course will introduce the processes of

understanding the customers, challenging the assumptions, redefining the problems, creating the solutions in human-centric ways and adopting a hands-on approach in prototyping and testing the solutions.

TESL2003 FIRST AND SECOND LANGUAGE ACQUISITION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to introduce students to central issues in language acquisition; help them to understand the processes of language acquisition and foster their ability to conduct a meaningful project which relates to language acquisition.

TESL2013 APPROACHES TO SECOND LANGUAGE TEACHING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to: (1) help students understand the principles of teaching a second language; (2) help them learn about the history and application of various language teaching approaches, methods, techniques and strategies; (3) relate the learned knowledge and expertise to the language teaching situation in China; (4) explore the ways of applying these approaches and strategies to language classrooms.

TESL3003 BILINGUALISM AND BILINGUAL EDUCATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to explore the co-existence of languages in society; study the relation of bilingualism to cognitive development and cognitive style; deal with the social-psychological implications of bilingualism; understand the issues of medium of instruction, code-mixing and code-switching.

TESL3013 LANGUAGE AND EDUCATION

(3 units)

Pre-requisite(s): None

Course Description: This subject aims to: explore the interplay between language and education; understand the role of language in education from both linguistic perspectives and sociolinguistic perspectives.

TESL3033 CURRICULUM DEVELOPMENT AND MATERIALS DESIGN

(3 units)

Pre-requisite(s): None

Course Description: This course aims to (1) help students understand the concepts of development, process, change and evaluation in curriculum and materials design, with particular reference to ELT; (2) help them explore the factors affecting curriculum development and their impact on materials design; and (3) help them explore the role of the teacher in curriculum development.

TESL3043 ASSESSMENT AND EVALUATION

(3 units)

Pre-requisite(s): None

Course Description: This course aims to help students understand the general principles of language assessment and evaluation; help them understand different types of language tests and a variety of test questions; help them understand recent developments in language testing techniques and scoring systems; help them learn some basic skills of preparing language assessment.

TESL3063 LANGUAGE TEACHING METHODOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop: students' practical skills and techniques of teaching foreign languages; students' ability to design and or select content and materials, and evaluate student and teacher performance.

TESL3083 CLASSROOM COMMUNICATION FOR LANGUAGE TEACHERS

(3 units)

Pre-requisite(s): None

Course Description: This course aims to prepare students to undertake language-teaching practicum in a school setting; develop their communication skills as a teacher in an English language classroom; and enhance their awareness of the patterns of classroom interaction and communication of the teacher and the learners.

TESL3093 ERROR ANALYSIS AND FEEDBACK ON STUDENT WRITING

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop: an understanding of the types of errors and level of errors that Chinese EFL learners produce; an awareness of some common lexico-grammatical errors produced by Chinese EFL learners; and the skills for identifying and correcting common lexico-grammatical errors produced by Chinese EFL learners.

TESL4013 ENGLISH FOR SPECIFIC PURPOSES

(3 units)

Pre-requisite(s): None

Course Description: This course introduces the principles, considerations and practices. It aims to help students understand the characteristics and variations of language use in professional settings; help them master the skills of identifying the learners' special needs; familiarise them with the use of computer concordances in language analysis and materials development for ESP.

TESL4053 LANGUAGE-TEACHING PRACTICUM I

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with practical experience in teaching English in a school setting (primary or secondary), under the guidance of an academic supervisor and a mentor teacher at the host school.

TESL4063 LANGUAGE-TEACHING PRACTICUM II

(3 units)

Pre-requisite(s): TESL4053 LANGUAGE-TEACHING PRACTICUM I

Course Description: This course provides students with additional practical experience in teaching English in a school setting (primary

or secondary), under the guidance of an academic supervisor and a mentor teacher at the host school.

TESL4083 RESEARCH SKILLS IN LANGUAGE STUDIES AND TESOL

(3 units)

Pre-requisite(s): TESL2003 FIRST AND SECOND LANGUAGE ACQUISITION

Course Description: This course aims to (1) prepare students to undertake research in a language classroom or to more formally study some language-teaching/language-learning practices; (2) develop the basic research skills in data-gathering and data analysis; and (3) develop students' ability to read applied linguistic research critically.

TESL4093 LEARNING THROUGH DIGITAL NARRATIVES

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the development of digital narrative projects for educational purposes. Students will be equipped with practical knowledge and skills on storytelling targeting at a specific group of audience, employing appropriate software for developing digital learning materials in the form of narratives, and disseminating the materials to the target audience.

TESL4103 MATERIALS EVALUATION AND PRODUCTION FOR LANGUAGE TEACHING

(3 units)

Pre-requisite(s): TESL3033 CURRICULUM DEVELOPMENT AND MATERIALS DESIGN, and TESL4083 RESEARCH SKILLS IN LANGUAGE STUDIES AND TESOL

Course Description: This course is an extension of TESL3033 Curriculum Development and Materials Design, in which the students have developed language teaching materials targeting at specific groups of learners in a school setting. This course will be devoted to the production-related aspects of materials development. It aims at equipping students with practical and hands-on skills in piloting, evaluating and revising language teaching materials within a school setting. Students will gain conceptual and practical experience at an entry-level that is necessary for developing materials for commercial publication.

TRA1003 INTRODUCTION TO TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This is a foundational course with the objectives of both training students in the basic approaches to translation while also engaging students in the challenges common to the practice of translation. Various translation skills, methods and tools will be introduced and analysed. Special emphasis will be placed on the development of the students' bilingual and bicultural knowledge, as well as their comprehensive understanding of translation in today's world featuring the advancement of globalization, technology, multimedia and artificial intelligence.

TRA1003 PRINCIPLES AND METHODS OF TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This is a foundational course with the objectives of both training students in the basic approaches to translation while also engaging students in the challenges common to the practice of translation. Various translation skills and methods will be analysed and compared. Special emphasis will be placed on the development of the students' knowledge of cultural backgrounds and difference.

TRA2003 GENERAL TRANSLATION I

(3 units)

Pre-requisite(s): None

Course Description: This course aims at providing a foundation in the theory and the practice of translation and applying that knowledge to communicate effectively in diverse cultural and linguistic contexts. Particular emphasis is placed on translation in accordance with different professional text types.

TRA2013 GENERAL TRANSLATION II

(3 units)

Pre-requisite(s): TRA2003 GENERAL TRANSLATION I

Course Description: This course is a continuation of TRA2003 General Translation I. TRA2013 General Translation II builds on students' knowledge base in theory and practice in order to translate effectively different text types in various professional and cultural contexts. Students will synthesise diverse strategies in order to practise translation successfully in a rapidly changing professional field.

TRA2023 CONTRASTIVE LANGUAGE STUDIES: ENGLISH AND CHINESE

(3 units)

Pre-requisite(s): None

Course Description: This course trains students to categorise the linguistic components in Chinese and English languages. Students will then identify the distinctive linguistic features for both languages, and integrate a contrastive analysis in order to develop effective problem-solving strategies.

TRA2033 COMMUNICATION AND TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course provides the students with the knowledge and skills base to achieve a competency in translation and bilingual communication. Fundamental theories of bilingual and bicultural communication will be summarised. Students will apply the theoretical framework to perform translation and bilingual communication in diverse professional and cultural contexts.

TRA2043 READING CHINESE LITERATURE IN TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course considers English translations of Chinese literature. It trains students to reconstruct the world of Chinese literature through linguistic, cultural and literary translation. Literary analysis of the Chinese source-texts will be compared with

the English translation to discover the shift of focus and the change of reader's reception.

TRA2053 TRANSLATION AS ADAPTATION

(3 units)

Pre-requisite(s): None

Course Description: This course trains students to reconstruct translation of the same source text in different forms of cultural production. The intricate relationship of translation and adaptation will be analysed to construct and critique the text and its contexts. The course will illustrate "trandaption" (translation-adaptation) with several well-known examples, such as "梁祝" and Shakespearean drama.

TRA2083 GENERAL TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: The course includes the foundational aspects of translation theory and practice, aiming to equip students with the skills to communicate effectively in diverse cultural and linguistic contexts. It emphasizes the translation of various professional text types. Students will build upon their knowledge base, synthesizing diverse strategies to navigate the dynamic landscape of professional translation.

TRA2093 TRANSLATION ACROSS MEDIA

(3 units)

Pre-requisite(s): None

Course Description: This course examines the various forms of multimedia translation, including news translation, audiovisual translation, and many novel translation modes in the digital environment. It aims to provide students with a comprehensive understanding of the principles, techniques, and ethical considerations involved in translating content between verbal, visual, aural, and digital formats. It is expected that students can appreciate the complexities and possibilities of translation across various media forms, making students valuable contributors to our increasingly globalized and digitized world.

TRA2103 INTRODUCTION TO LANGUAGE AND TRANSLATION TECHNOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to provide students with a fundamental understanding of the concepts, principles, techniques, and practical application of language and translation technology. The objectives of this course are to enable students to appreciate the role of technology in language service, to develop an awareness of the various tools available, to apply these tools to solve practical problems, and to critically evaluate the challenges and opportunities associated with the use of technology in language service.

TRA3003 INTRODUCTORY INTERPRETING

(3 units)

Pre-requisite(s): None

Course Description: This is an introductory course providing a foundation in the theory and practice of English-Chinese and Chinese-English interpreting. Students are trained with a strong skill base in listening comprehension as well as in bilingual oral presentation. The focus will be on the development of students' competence in sight interpreting and consecutive interpreting of source texts on general and specialised topics. Students will access innovative on-line technology as a vehicle for the enhancement of interpreting and self-evaluation skills. The medium of instruction will be in English while teaching materials will both be in Putonghua/Chinese and English for C-E and E-C interpreting.

TRA3013 ENGLISH FOR TRANSLATORS

(3 units)

Pre-requisite(s): None

Course Description: This course builds on the English skills developed in foundation course in order to enhance students' proficiency in translation from Chinese to English in professional contexts. Especial focus will be given to the training of students in making effective linguistic and communicative choices in diverse professional and cultural contexts.

TRA3023 TRANSLATION INTERNSHIP I

(3 units)

Pre-requisite(s): None

Course Description: This course provides students with practical working experience. The students will apply their skills in translation and communication in professional contexts and will be given the opportunity to experience different aspects of the profession such as translating, interpreting, copywriting, proof-reading and document preparation. Students will work under the guidance of their academic supervisors and host supervisors from the employment.

TRA3033 CULTURE AND TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course analyses the relationship between culture and translation. It identifies the translator as cultural mediator and applies the bicultural knowledge and sensitivities of students to the practice of translation. The significance of culture in translation will be measured and translation strategies will be provided in order to guide students in effectively engaging the cultural gaps between Chinese and non-Chinese cultures.

TRA3043 PROFESSIONAL TRANSLATION IN THE NEW ERA

(3 units)

Pre-requisite(s): None

Course Description: This course builds on the students' knowledge of translation theory and practice in providing students with the tools to apply that knowledge base to the practice of translation. Students will distinguish the most effective communication and translation strategies in order to engage successfully translation problems typifying different professional contexts. Students will be trained in professional standards and ethics and will be given the requisite skills to evaluate their own and others' performances as translators.

TRA3043 TRANSLATION IN WORKPLACE

(3 units)

Pre-requisite(s): None

Course Description: This course builds on the students' knowledge

of translation theory and practice in providing students with the tools to apply that knowledge base to the practice of translation. Students will distinguish the most effective communication and translation strategies in order to engage successfully translation problems typifying different professional contexts. Students will be trained in professional standards and ethics and will be given the requisite skills to evaluate their own and others' performances as translators.

TRA3053 RESEARCH METHODS FOR TRANSLATION STUDIES

(3 units)

Pre-requisite(s): TRA1003 PRINCIPLES AND METHODS OF TRANSLATION or TRA1003 INTRODUCTION TO TRANSLATION

Course Description: This course builds on students' knowledge base in translation theory with the aim of guiding students to conduct successfully a research project. Students are taught best practices in research and writing and are given a further opportunity to enhance their knowledge of translation theory and practice. Emphasis is given to recent development of translation studies as well as to innovations in research methodology. This course can serve as a preparation for postgraduate studies.

TRA3063 MEDIA TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course trains students to devise operational plans and translation strategies for the media. Media translation includes bilingual publication, journalistic writings, and TV and radio broadcasting. Students will be given relevant translation knowledge and skills and will then apply that knowledge base to the practice of media translation. Special emphasis will be placed on the role of a media translator as a "gate-keeper" of information transfer and ethics in journalism in the sense of a media translator will sometimes act as the manipulator as well as the censor of the source information.

TRA3083 GENERAL INTERPRETING

(3 units)

Pre-requisite(s): TRA3003 INTRODUCTORY INTERPRETING

Course Description: This course builds on Introductory Interpreting and aims at developing students' intermediate-level interpreting skills in English to Chinese and Chinese to English. The focus is on the enhancement of students' English listening comprehension and bilingual oral skills, and students are given access to innovative technological tools to improve on their skills in interpreting and self-evaluation. Further, the students are provided with feedback on their competence in sight interpreting and consecutive interpreting of increasingly complex source texts. The medium of instruction will be in English while teaching materials will both be in Putonghua/Chinese and English for C-E and E-C interpreting.

TRA3093 TRANSLATION OF SCIENTIFIC AND TECHNOLOGICAL TEXTS

(3 units)

Pre-requisite(s): None

Course Description: This course will focus on the practical application of a translation knowledge base to the translation of scientific and technological documents. Special emphasis will be given to translation in fields that are rapidly growing including the computer, internet, Chinese medicine, aviation and automotive industries. Students will become conversant in the appropriate technical language and apply that jargon to the appropriate text type in translation.

TRA3103 TRANSLATION OF LEGAL AND GOVERNMENT DOCUMENT

(3 units)

Pre-requisite(s): None

Course Description: This course trains students to practise translation in the field of law and for the government. Text-types arising in these two areas will be chosen for textual analysis and translation critique. Students will apply the skills and knowledge for future career as professional translators.

TRA3113 COMMERCIAL TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course will train students to apply their knowledge base to practise commercial translation. Commercial translation includes, but is not limited to, the documents of banking, finance, logistics, and business transaction. Students will synthesise the linguistic functions and stylistic analysis of commercial documents, and determine for the most appropriate translation strategies.

TRA3123 COMPUTER-AIDED TRANSLATION

(3 units)

Pre-requisite(s): TRA2103 INTRODUCTION TO LANGUAGE AND TRANSLATION TECHNOLOGY

Course Description: This course aims to provide students with advanced training in computer-aided translation (CAT), helping them acquire knowledge in and understanding of CAT, machine translation (MT) and other essential translation technology utilized by translators in the industry. Significantly, this course equips students with hand-on experience in the application of CAT tools, including Trados, memoQ, YiCAT and/or other tools, which are state-of-the-art technology designed to increase translation productivity and enhance translation quality.

TRA3133 INTERNSHIP PLACEMENT

(6 units)

Pre-requisite(s): None

Course Description: This course aims to offer students hands-on experience by immersing them in a practical work environment. Students will be required to apply their translation and communication skills within a professional context. The course provides a comprehensive exposure to various facets of the language service profession, including but not limited to translation, interpreting, copywriting, and communication. Under the guidance and mentorship of workplace supervisors and ATS instructor(s), students will gain a nuanced understanding of the practical intricacies and demands of the field, as well as develop a career planning for their future in a related profession.

TRA3143 AUDIOVISUAL TRANSLATION AND TECHNOLOGY

(3 units)

Pre-requisite(s): None

Course Description: This course aims to enable students to explore and evaluate the knowledge, techniques, and fundamental skills necessary for audiovisual translation (AVT). AVT includes inter-lingual translation such as subtitling, dubbing, and voice-over, as well as intra-lingual and inter-semiotic translation, including audio description for the partially sighted and subtitling for the hard-of-hearing. Additionally, the course will equip students with the necessary technology skills that aid and facilitate their completion of practical AVT tasks in daily life.

TRA3153 TRANSLATING CHINA IN THE DIGITAL AGE

(3 units)

Pre-requisite(s): None

Course Description: This course is dedicated to the comprehensive exploration of the translation of Chinese narratives in the modern digital landscape. It aims to equip students with the skills to effectively convey Chinese stories to international audiences while simultaneously fostering the development of English discourses that capture the complexities of contemporary China. Moreover, the course seeks to cultivate bilingual competence in government, political, diplomatic, and media contexts. It nurtures professional translators capable of meeting the demands of China's international role, facilitating cross-cultural communication, and enriching the discourse surrounding China on the global stage in the digital age.

TRA4003 TRANSLATION CRITICISM

(3 units)

Pre-requisite(s): TRA1003 PRINCIPLES AND METHODS OF TRANSLATION or TRA1003 INTRODUCTION TO TRANSLATION

Course Description: This course introduces students to the principles and methods of criticising translated texts in both Chinese and English. Students will be guided to explore the relationship between translation theory and translation practice. The course focuses on diverse methods of translation criticism and asks students both to apply those theoretic tools to analyse other translations while also performing rigorous self-reflections. Various published translations from diverse genres will be sampled and examined.

TRA4004 FINAL YEAR PROJECT I (ATS)

(3 units)

Pre-requisite(s): TRA1003 PRINCIPLES AND METHODS OF TRANSLATION or TRA1003 INTRODUCTION TO TRANSLATION

Course Description: This course provides students with diverse strategies to perform an extended translation of a text from English to Chinese or from Chinese to English. The students will be given a framework in contemporary theory and practice with an emphasis on cultural context. The students will then apply that framework to develop rigorous commentaries. Further, students will be mentored on strategies to achieve a self-evaluation in accordance with standards and practices typifying the practice of translation.

TRA4005 FINAL YEAR PROJECT II (ATS)

(3 units)

Pre-requisite(s): TRA4004 FINAL YEAR PROJECT I (ATS)

Course Description: The course is a continuation of Final Year Project I. It will further validate students' competence in producing an accurate and efficient translation. The text to be translated will be from English to Chinese or from Chinese to English between approximately 3,000 and 4,000 words/characters in the source language. Students will submit a commentary in addition to the translation. The commentary, written in English, supports the rationale for choosing the source-text and critically considers the special language features and cultural background of the source text, as well as determines the most appropriate strategies for all problems. Students need to critique the relevant translation theory for the translation produced in Final Year Project II.

TRA4013 PROFESSIONAL INTERPRETING

(3 units)

Pre-requisite(s): TRA3003 INTRODUCTORY INTERPRETING

Course Description: This course is a continuation of Introductory Interpreting and General Interpreting. Students will build on a theoretical and skills knowledge base in analysing problems and solutions in professional interpreting. Students will be trained with the appropriate skills-set to enhance their self-assessment capability and thereby, to improve their performances. The course targets students interested in the profession of interpreting, and the training will be intensive and practical, allowing students hands-on experience in a professional setting. Special emphasis will be given to consecutive interpreting from English to Chinese and Chinese to English in dynamic fields such as news, tourism, and economy. The medium of instruction will be in English while teaching materials will both be in Putonghua/Chinese and English for C-E and E-C interpreting.

TRA4023 GENDER AND TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course analyses the relationship between gender and translation studies. Students will employ and critique different translation strategies for feminist and non-feminist discourses. The theoretical concepts will be illustrated through an analysis of diverse translations. Special emphasis will be given to the application of contemporary feminist theories.

TRA4033 TRANSLATION INTERNSHIP II

(3 units)

Pre-requisite(s): TRA3023 TRANSLATION INTERNSHIP I

Course Description: This course provides students with further practical work experience in applying their skills in translation and communication in fields such as editing, translating, interpreting, copywriting, text drafting, information collection and extraction, proof-reading, vetting, and the preparation of PR publication. Students will continue to work under the guidance of their academic supervisors and host supervisors from the employment.

TRA4043 LITERARY TRANSLATION

(3 units)

Pre-requisite(s): None

Course Description: This course focuses on the "practical" skills of translating literary texts. Such skills can include the translation,

re-creation and re-presentation of an image and of imagery and imagination embedded in the source texts. The cultural richness and its translatability will also be analysed. Literary works in Chinese and English literatures will be considered both to indicate issues common to translation and to identify strategies that are typically used by professional translators to address these issues.

TRA4053 SPECIAL TOPICS IN TRANSLATION

(3 units)

Pre-requisite(s): TRA1003 PRINCIPLES AND METHODS OF TRANSLATION or TRA1003 INTRODUCTION TO TRANSLATION

Course Description: This course is an in-depth study of selected themes, theorists and theoretical issues in translation and interpreting studies. These may include such topics as "Nida on Translation", "Cultural Turn in Translation", "Translation and Globalisation", and "Translation of Popular Culture".

TRA4063 SIMULTANEOUS INTERPRETING

(3 units)

Pre-requisite(s): TRA3003 INTRODUCTORY INTERPRETING

Course Description: Simultaneous Interpreting develops students' skills in simultaneous interpreting. This course targets students who are interested in becoming professional interpreters. It provides intensive and practice training in a professional context. Students will receive guidance from professionals on the practice of simultaneous interpretation in the dynamic fields such as journalism, tourism, and economics. The medium of instruction will be in English while teaching materials will both be in Putonghua/Chinese and English for C-E and E-C interpreting.

TRA4073 TRANSLATION THEORIES AND PHILOSOPHIES

(3 units)

Pre-requisite(s): TRA1003 PRINCIPLES AND METHODS OF TRANSLATION or TRA1003 INTRODUCTION TO TRANSLATION

Course Description: This course gives a strong foundation for students who aspire to pursue postgraduate studies in translation. It compares and contrasts influential theories and philosophies of translation in China and the West. Further, the course provides students with the theoretical tools to analyse and to apply the translation theories and philosophies in diverse fields of research.

TRA4083 ADVANCED ENGLISH FOR TRANSLATORS

(3 units)

Pre-requisite(s): TRA3013 ENGLISH FOR TRANSLATORS

Course Description: This course builds on the English skills developed in English for Translators in order to further develop students' proficiency in translation from Chinese to English in professional contexts. Special focus will be given to the training of students in evaluating socially acceptable linguistic choices in specific communication communities.

TRA4093 FINAL YEAR PROJECT (ATS)

(6 units)

Pre-requisite(s): TRA1003 PRINCIPLES AND METHODS OF TRANSLATION or TRA1003 INTRODUCTION TO TRANSLATION

Course Description: This course provides students with advanced and profound translation skills and theories to either perform the translation of a text and write a commentary or to conduct research on topics of translation and interpreting studies. Students doing translation with commentaries will be trained in translation skills, process management, and quality assessment, in line with norms in the translation industry; students will then complete the translation of a chosen text and write a commentary by self-evaluating the translation quality. Students conducting research will be equipped with knowledge of state-of-the-art translation and interpreting theories and methodology; by applying the knowledge, students will develop a strong thesis on current topics in translation and interpreting.

UCAI1003 INTRODUCTION TO AI LITERACY

(3 units)

Pre-requisite(s): None

Course Description: The aim of this course is to equip students well for the new AI era—to prepare them for confronting its challenges and for making the most of the new possibilities for achievement that it offers. The course seeks to cultivate in students a comprehensive competence in AI. This multifaceted literacy includes: technical proficiency in using AI technology, a good grasp of AI's impact on the contemporary economy and society, understanding of the ethics involved in AI applications, familiarity with AI's potential to augment human creativity and to create culture, knowledge of how to apply AI to learning foreign languages, and the ability to use AI to improve academic writing.

UCLC1003 UNIVERSITY CHINESE

(3 units)

Pre-requisite(s): None

Course Description: The objective of this course is threefold. First, through taking the course, students are required to advance their knowledge and skills in Chinese speaking, reading, and composition. Second, this course will enable students to develop a solid understanding of Chinese literature, cultivating their abilities to appreciate, analyse, and evaluate selected works of ancient and modern times. Third, this course seeks to conduct students to view Chinese literature from an interdisciplinary perspective, exploring its strong connections with culture, history, and society.

UCLC1013 ENGLISH FOR ACADEMIC PURPOSES I

(3 units)

Pre-requisite(s): None

Course Description: This course aims to develop students' language skills (speaking, listening, reading and writing), critical thinking ability, and to introduce learning strategies to prepare them for success in academic programmes that use English as a medium of instruction. Using a range of authentic, current and relevant materials in English, such as articles, lectures, and visual representations of data, students will be introduced to the key academic skills of essay writing and seminar participation. They will also explore a number of strategies to promote independent learning, including techniques for managing unfamiliar vocabulary, note-taking, planning, evaluating sources, peer-reviewing and proofreading.

UCLC1023 ENGLISH FOR ACADEMIC PURPOSES II

(3 units)

Pre-requisite(s): UCLC1013 ENGLISH FOR ACADEMIC PURPOSES I

Course Description: This course aims to prepare students for communicating in English-speaking academic environments by building upon the reading, writing, listening and speaking skills taught in English I, as well as further developing their ability to produce formal English. Through a detailed examination of the requirements of producing English for academic purposes, students will learn to identify and evaluate suitable academic sources and to understand and avoid plagiarism. Students will be required to present information in both spoken and written formats appropriate in an academic context.

UCLC1033 ENGLISH FOR ACADEMIC PURPOSES III

(3 units)

Pre-requisite(s): UCLC1013 ENGLISH FOR ACADEMIC PURPOSES I, and
UCLC1023 ENGLISH FOR ACADEMIC PURPOSES II

Course Description: This course aims to develop students' persuasive speaking and writing skills in English to allow them to construct effective arguments, express their opinions, and seek to influence others. Through a detailed consideration of the techniques that can be used in speech and writing to try to convince others and/or change beliefs and behaviours, the course aims to prepare students to recognise when others are seeking to persuade them and to be able to defend their viewpoints and refute counterarguments. After completing this course, students should be better prepared to engage meaningfully in both civil and academic discourse, as well as to use persuasion as a tool to try to enact meaningful change.

WPEX1013 EMOTIONAL INTELLIGENCE

(1 unit)

Pre-requisite(s): None

Course Description: The course aims to improve students' awareness of their own unique emotional patterns, their understanding of others' emotions, as well as their abilities to empathise and act in responsible manners when working with others in team settings. Through group activities and exercises students will be enabled to examine, reflect and consolidate their newly acquired emotional management competencies and team skills.

WPEX2013 EXPERIENTIAL ARTS

(1 unit)

Pre-requisite(s): None

Course Description: The course, in the form of workshop, aims to provide students with a "hands-on" aesthetic learning experience by having apprentice-style interaction with talented artists. The final product or performance from each workshop will be presented at a final exhibition or show on campus. Students have the choice to select one out of normally 13-16 workshops offered in a semester (e.g., painting, design, drama, Guqin and other). The course content is divided into 3 phases: Orientation, Action Learning and Final Show/Exhibition & Reflection.

WPEX2023 VOLUNTARY SERVICE

(1 unit)

Pre-requisite(s): None

Course Description: The course aims to develop students into active and responsible citizens at various levels (think globally, act locally) by facilitating them to adopt a global perspective and equipping them with necessary attitude, skills and knowledge, though the process of voluntary action. Students are facilitated to become an active, persistent and reflective citizen-in-action.

WPEX2033 ENVIRONMENTAL AWARENESS

(1 unit)

Pre-requisite(s): None

Course Description: The course aims to develop students' understanding of local and global environmental and sustainability problems, and to raise students' environmental awareness and responsibility through environmental experiential education and practices. After receiving proper training, students will work on campus and community, through which students are able to shape sustainable lifestyle.