

## LIST OF COURSES OFFERED FOR INBOUND MOBILITY (2<sup>ND</sup> SEMESTER INTAKE)

### THE ACADEMY OF ARTS & CREATIVE TECHNOLOGY (ACT)

UH6212001 - MUSIC					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	CM11401	MUSIC NOTATION SOFTWARE	This course focuses on the usage of Music Notation Technology. The course cover not only the knowledge in music notation, but also the history and the development of musical notation, music notation for education, understanding the different types of musical score notation used in different settings such as in concerts, smaller ensembles, symphonic band, big orchestra and commercial jazz band.	1	1/2
2	CM13103	MALAYSIAN TRADITIONAL MUSIC II	This course give students the opportunity to play traditional instruments that are commonly found in Malaysia and one of these instruments is the gamelan. The students are taught to read numbers, a form of musical notation, to play the various gongs that are found in a Gamelan ensemble. Local repertoires would include traditional and popular tunes.	3	1/2

UH6212002 - CREATIVE ARTS					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	CA10603	BASIC ACTING	This course is a basic acting course that focuses on the history of the development of acting art and an introduction to an actor's self-preparation techniques. Students will be exposed theoretically and practically on the basis of existing acting theory. This exposure is to enable students to make initial preparations before they focus in the theatre module and learn in depth about specific acting techniques.	3	1/2
2	CA24002	MALAYSIAN DANCE II	This course is an extension of the Malaysian dance course. But in this course provides mastery over finer movement techniques and orderly politeness more challenging in traditional Malaysian dance. Apart from mastering the technique and internal order movement, students also need to understand and master the concept of the performance as well as the background traditional dance learned.	2	2/2
3	CA32003	NEW MEDIA WRITING	This course improves students' skills and understanding in the field of writing using new media, which is the internet such as blogs, social sites, and YouTube. This course provides an opportunity to students to explore new career opportunities in the field of creative writing.	3	3/2

**UH6210001 - VISUAL ARTS TECHNOLOGY**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	CV10602	DIGITAL GRAPHIC PRODUCTION II	This course provides students with an understanding and skills in photography and image editing in graphic design through screen display. Students explore basic photography skills in terms of techniques, methods and concepts of producing graphic artwork. Students are given exposure to the publication of e-books aimed at documenting works in addition to sketches in the folio.	2	1/2
2	CV10202	VISUAL ART LITERACY II	Students are exposed to the principles of design and structures, to understand the concept of object production through organized artistic methods and processes. Mastery and understanding of the elements of art, design principles and design structures can effectively increase the potential to work ethically through the exploitation of creative and innovative media. Learning specifically to design principles through exploitation, media diversity and techniques help and improve students' abilities in the context of producing a design.	2	1/2
4	CV21202	BASIC 3D ANIMATION	This course touches on the basic concepts of model construction in 3D animation as a whole. It explains how 3D models in animation are built, types, and ways of applying mesh models, materials, lighting, texture mapping, rendering methods, cloth, hair, and special effects. This course introduces the basics of 3D model making before students produce a final project. The platform used for the production of 3D animated models is Macintosh or PC Platform, in addition to the use of open-source software: Blender, and the introduction to Maya and 3D Studio Max.	2	2/2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### LABUAN FACULTY OF INTERNATIONAL FINANCE

UH6343002-INTERNATIONAL FINANCE					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	GT20203	Operations Management	Operation management is based on the basic change in the nation's economy from manufacturing sector to service provider. This course examines the management system of an organization, which has an impact on productivity and quality of products and services produced by an organization. Important issues discussed in this course include materials and inventory management, management quality, logistics and distribution, manufacturing process, supply chain management, and evaluation of work and time.	3	2/2

UH6343003-INTERNATIONAL & OFFSHORE BANKING					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	GB30603	Islamic Banking and Finance	The course is designed to expose students with the fundamental concepts and terms used in Islamic banking and finance operations through the developmental history and its institutions. These concepts and terms are important to the understanding of what and why Islamic banking and finance are all about. The focus starts with a discussion of the history of Islamic banking and finance in Malaysia and how it evolved over time, followed by the theoretical framework of Islamic banking and finance. Later, the scope of Islamic banking and finance, which is divided into a few important components, are elaborated such as Islamic financing, Islamic deposits and Islamic financial instruments. Furthermore, this course endeavours students to make comparison on what makes the Islamic banking and finance system differ from the conventional system.	3	3/2

UH6342002-INTERNATIONAL MARKETING					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	GC31603	Customer Relationship Management	Introduces the basic theories and methodology of customer relationship management, including identifying profitable customers, understanding their needs and wants, and building a bond with them by developing customer-centric products and services directed toward providing customer value. Topic will cover the issues in the life cycle: market segmentation, customer acquisition basket analysis and cross-selling, customer retention and loyalty, and practical issues in implementation of successful CRM programs.	3	1/2

2	GC30403	Retail Management	This course focuses on the retail side of modern marketing encompassing knowledge, strategies and managerial skills necessary for successful operation of retail enterprises. It benefits students who are interested in middle management, small business operations, retail and franchise ownership. Topics include customer communications, site selection, planning, merchandise buying, promotion, human resources management, pricing, inventory management and resource management	3	3/2
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**UH6343004-INTERNATIONAL FINANCIAL ECONOMICS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	GT11103	Economics	Economics is a crucial knowledge in explaining the function of market and prices as allocative mechanisms. Thus, in this class, students will be able to apply basic concepts of equilibrium to both microeconomics and macroeconomics, by identify key macroeconomic indicators and measures of economics change, growth, and development. The course also employs the basic economics' terminology such as marginal analysis, cost-benefit analysis, as demonstrate how economics theories link closely to various social, political as well as institutional issues both in domestics and international policies and norms.	3	1/2

**UH6343005-ISLAMIC FINANCE**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	GE30803	Islamic Financial Instrument Development	This course discusses about the philosophy and methodology on Islamic finance and banking product development. Shariah, Usul fiqh and fiqh muamalat are playing main roles toward the formation of Islamic finance and banking product. Besides that, the second sources of Islamic knowledge like Qiyas and Istihsan are also addressed with examples. By learning this course, students are able to increase their understanding on the processes of product formation and product marketing of Islamic finance and banking. In addition, this course also renders emphasis on the role of Shariah Supervisory Body and Shariah Consultant for Islamic bank and Islamic windows respectively. The roles performed by these Shariah bodies are important in ensuring the latest Islamic finance and banking products are in line with the Islamic teaching.	3	2/2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF COMPUTING AND INFORMATICS

UH6481001/HC00 - COMPUTER SCIENCE (SOFTWARE ENGINEERING)					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KT24603	DATABASE	This course introduces the fundamentals of database, database management systems, and database systems. Topics like normalization, SQL, entity relationship diagram, database transactions, backup and security are taught to expose the students on the complexity of modelling the real-world application systems with database. Other topics covered include principles and methodologies of database design, and techniques for database application development.	3	2 / Sem 2
2	KT24403	OPERATING SYSTEM	The operating system provides a well-known, convenient, and efficient interface between user programs and the bare hardware of the computer on which they run. The operating system is responsible for allowing resources to be shared, providing common services needed by many different programs. Particular emphasis will be given to three major OS subsystems: process management (processes, threads, CPU scheduling, synchronization, and deadlock), memory management (segmentation, paging, swapping), file systems, and operating system support for distributed systems. Thus, this course will introduce to students the basic design and implementation of Operating System. Student will learn computer system structures, memory management, process synchronization, file system and CPU scheduling.	3	2 / Sem 2
3	KK24402	GRAPHICS AND VISUALISATION	Graphics and Visualisation concepts algorithms are found in a significant and increasing number of modern applications and this is a trend that is likely to continue. Today's computing graduates need a firm grasp of graphics fundamentals such as vectors, coordinates systems, modelling, cameras and rendering. This course aims to provide a firm foundation for such topics and is intended to be both immediately useful and the basis for further study.	2	2 / Sem 2
4	KK35203	UI/UX DESIGN	This course teaches the principles and practice of UI/UX design. User Interface (UI) design refers to the way the interface looks (the actual layout of its elements). User Experience (UX) design tackles how it feels to use the product (what do we do and how do we feel). Students will learn and demonstrate their understanding of the concepts of UX/UI via group projects and presentations to design, implement and evaluate system interfaces.	3	3 / Sem 2
5	KK35403	MOBILE APPS DEVELOPMENT	Mobile app development is rapidly growing. From retail, telecommunications and e-commerce to insurance, healthcare and government, organizations across industries must meet user expectations for real-time, convenient ways to conduct transactions and access information. This course is designed to show students how to create consumable web services for mobile devices, walk students through the design and development of mobile user interfaces. It uncovers what students need to get started in coding mobile webapps and provide the tools for development.	3	3 / Sem 2

UH6481002/HC05 - COMPUTER SCIENCE (NETWORK ENGINEERING)					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KP14203	OBJECT-ORIENTED PROGRAMMING	This course is an introduction to object-oriented programming using Java. Students will learn how to write object-oriented programs by exposing them to the concepts of class, how to define their own classes, inheritance and polymorphism. Apart from that, some important features of Java will be discussed. These include control structures, event-driven programming, and file I/O.	3	1 / Sem 2
2	KT14803	NETWORK FUNDAMENTALS	To provide an integrated and comprehensive coverage of networking topics, from fundamentals to advanced applications and services, while providing opportunities for hands-on practical experience. The course teaches networking based on technology, covering networking concepts using a top-down, theoretical, and integrated approach – from network applications to the network protocols and services provided to those applications by the lower layers of the network.	3	1/Sem 2
3	KT24202	ARTIFICIAL INTELLIGENCE	This is a general introductory course to AI. This course aims to introduce the principles and fundamental techniques of artificial intelligence, and in particular, machine learning. Students will learn the fundamentals and state-of-the-art techniques and acquire practical insights into the current development of this field.	2	2 / Sem 2
4	KP24603	ENTERPRISE NETWORKS AND WIRELESS TECHNOLOGIES	This course describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access. Students gain skills to configure and troubleshoot enterprise networks and learn to identify and protect against cybersecurity threats.	3	2/Sem 2
5	KP34213	NETWORK PROGRAMMING	This course will provide students with a fundamental understanding of network programming through Python. It includes the overview of Python and covers the topics of TCP/IP, sockets, HTTP, and client-server architecture. You will acquire the knowledge of the basic concepts, modules, and third-party libraries that you are likely to use when communicating with remote machines using the most popular Internet communication protocols.	3	3 / Sem 2

**UH6481003/HC12 - MULTIMEDIA TECHNOLOGY**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	IM22403	Technopreneurship	The course equips students with the entrepreneurship skills in technology where they will learn to create business ideas, analyze market opportunities, develop business model, prepare business plan, evaluate marketing strategy, conclude financial analysis, as well as to manage business activities and projects.	3	Sem 2 2023/2024
2	IM32503	System Analysis and Design	This course will provide students with fundamental aspects in developing Information Technology projects. They will learn basic skills, methodologies, techniques, tools and perspective essential for systems analysts to develop information systems.	3	Sem 2 2023/2024
3	IM33203	Management Information System	This course teaches students how organizations use ICT and Information Systems to achieve their objectives. In the early part of this course, the discussions focus on how organizations use Information Systems to achieve their objectives. It is then followed by a discussion on how to secure an information system. The latter parts discuss how IS can help managers to enhance decision making processes.	3	Sem 2 2023/2024
4	IT32703	Internet of Things	This course will describe the market around the Internet of Things (IoT), the technology used to build these kinds of devices, how they communicate, how they store data, and the kinds of distributed systems needed to support them. Divided into four modules, students will learn about the IoT Concepts and architecture, IoT Enabler and Solutions, IoT data and knowledge management, and IoT Reliability, Security, and Privacy.	3	Sem 2 2023/2024
5	IT22703	Cloud Computing	This course introduces the core concepts of cloud computing. Students will gain the foundational knowledge of cloud computing technologies from a business perspective as also for becoming a cloud practitioner. The topics include standards-based cloud systems and their architecture. This subject also discusses multiple cloud delivery models, the plan for migration to a cloud model, governance, and security issues in a cloud model, and managing the cloud infrastructure.	3	Sem 2 2023/2024

UH6481004/HC13 - INFORMATION TECHNOLOGY (BUSINESS COMPUTING)					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	IE12203	Business Management	As e-commerce students, the course is outlined as an introduction to management principles in the context of business & management. It is necessary for the students to be equipped with necessary business skills and knowledge in order for them to carry out task and responsibilities in a competitive business environment in which technical skills are not sufficient to meet the challenges. This subject will mold the students with the fundamental knowledge and practice in managing e-business.	3	2023/ SEM 2
2	IT22303	Statistic	This course provides the undergraduate students with the knowledge from both descriptive and inferential statistics. This course covers the methods for describing sets of data, the theory of probability and probability distribution, performing estimation and hypothesis.	3	2023/ SEM 2
3	IT22103	Object Oriented Programming	This course introduces the fundamentals of Java Programming. In the first part, we discuss the basic concepts such as data types, syntax, flow control (sequence, selection and iteration), methods and arrays. In the second part, object-oriented programming concepts (class, object, inheritance, composition, UML class diagram, abstract class and interface class) are presented. In the last part, graphical user interface (GUI), event handling and exception are discussed.	3	2023/ SEM 2
4	IT22803	Big Data	This course provides an in-depth coverage of various topics in big data from data generation, storage, management, transfer, to analytics, with focus on the state-of-the-art technologies, tools, architectures, and systems that constitute big-data computing solutions in high-performance networks. Real-life big data applications and workflows in various domains (particularly in the sciences) are introduced as use cases to illustrate the development, deployment, and execution of a wide spectrum of emerging big-data solutions.	3	2023/ SEM 2
5	IE22803	E-Commerce Application Development	This course will provide students with a fundamental understanding as to how an HTML-compliant web site was developed, implemented, and maintained by using the Internet programming language. Students also learn two types of web programming language; client-side scripting (HTML5, CSS3, Canvas and JavaScript) and server- side scripting (PHP) with a simple connection to the SQL database (MySQL) using Apache Web Server.	3	2023/ SEM 2



**UH6481005/HC14 - COMPUTER SCIENCE (DATA SCIENCE)**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KT14203	COMPUTER ARCHITECTURE AND ORGANIZATION	This course is outlined to To enable student to explore the architecture of computer systems and technology behind the computer design.	3	1 / Sem 2
2	KT14403	DISCRETE STRUCTURE	This course covers logic, set theory, combinatorics, graph theory, discrete probability, and their applications in computer science. It provides students with a solid foundation in essential concepts and techniques used in the analysis and design of algorithms and data structures. Students will learn about propositional and predicate logic, set theory, counting techniques, graph theory, and probability. Overall, this course is essential for students to understand and analyze algorithms and data structures in computer science and mathematics.	3	1 / Sem 2
3	KD14403	FUNDAMENTAL OF DATA SCIENCE	This course covers managing the data science process itself. The data scientist must have the ability to measure and track their own project. This course also applies many of the most powerful statistical and machine learning techniques used in data science projects. It also involves a series of explicitly worked exercises in using the programming language R to perform actual data science work. Students will be preparing presentations for the various stakeholders: management, users, deployment team, and so on. Students must be able to explain the work in concrete terms to mixed audiences with words in their common usage, not in whatever technical definition is insisted on in a given field.	3	1 / Sem 2
4	KD34203	DATA VISUALIZATION	The aim of the course is to expose students to the basic concepts and techniques in data analysis and also in coding and building a visualization tool for data analysis. At the end of the course, students should be able to evaluate the relationship between variables, describe several methods that 'tour' the data looking for interesting structure (holes, outliers, clusters, etc.), develop and implement a program to visualize the output of the data analysis.	3	3/sem 2
5	KD34403	MACHINE LEARNING FOR DATA SCIENCE	This is an introductory course in machine learning (ML) that covers the basic theory, algorithms, and applications in Machine Learning. This course balances theory and practice and covers the mathematical as well as the heuristic aspects. The course will 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.	3	3/sem 2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF ENGINEERING

UH6526001-CIVIL ENGINEERING					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KA10802	Teknologi Binaan	This course will introduce the students to the basic knowledge of Construction Technology and to give them a clear understanding of different constructions in Civil Engineering, and methods of constructions. Students will acquire knowledge on preparatory work and implementation, earthworks, piling, concrete and concreting, floors, claddings and walls, roofs and roofing, finishing work, mechanized construction, and Industrialized Building System (IBS).	2	1/2
2	KA10603	Mekanik Gunaan	This course provides the fundamental concepts and principles employed by civil engineers. It is divided into two (2) parts: Statics and Dynamics. Statics deals with equilibrium of bodies at rest and moving at constant velocity. Meanwhile, Dynamics deals with bodies moving in accelerated motion.	3	1/2
3	KA21603	Kejuruteraan Geoteknik !	This course provides background knowledge on the properties and behaviour of soils for geotechnical engineering practice. Understanding of the course will help the students in designing civil and geotechnical engineering structures. Knowledge on properties and mechanics of soil include soil classification, mass-volume relationship, compaction, permeability and stress distribution.	3	2/2
4	KA23702	Teknologi Konkrit	This course provides knowledge on concrete, its ingredients, strength development, types and tests on ingredients to develop concrete with good engineering properties. The procedure to design proportion of ingredients to make concrete of required strength is included. The properties of admixtures, effect of curing, handling and placing concrete are also to be discussed.	2	2/2
5	KA34802	KejuruteraanTraffik	This course is an option course to expose students in the transportation planning and analysis. Topics to be covered are: transportation planning, highway capacity analysis, transportation modeling, urban transportation planning, parking studies and public transport studies.	2	2/2
6	KA35003	Hidrologi dan Sumber Air	This course seeks to introduce basic principles and knowledge of hydrological cycle and water budget; precipitation and rainfall analysis; evaporation and evapotranspiration; infiltration; surface runoff; hydrograph analysis; floods & flood routing; groundwater.	3	3/2

**UH6523001-ELECTRICAL & ELECTRONICS ENGINEERING**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KE11203	Analogue Electronics	This course is one of the foundation courses for an electrical and electronic engineering and related fields. It will provide the students with fundamental elements and concepts of analogue electronics such as pre-amplifier, amplifier, Bipolar Junction Transistor (BJT), Field effect transistor (FET), Metal-Oxide-Semiconductor Field-Effect Transistor (MOSFET), CMOS, Operational amplifier, and so on. Topics to be covered include basic amplifier and feedback theory, dc bias calculations and circuits, Circuit stability and frequency response, BJT and MOSFET small and large signal device models, gain and frequency response characteristics of amplifiers, large-signal characteristics, and operational amplifier design for different mode of operations as well. The analysis and design of analogue circuits incorporating Bipolar, MOSFET, CMOS and OP-Amp technologies will be considered.	3	1/2
2	KE21603	Material Science and Electronic Devices	This course is an introductory course on solid state electronic devices for undergraduate Electrical and Electronic Engineering students. The course is also multidisciplinary in nature integrating electrical engineering with materials science and engineering, mathematics, modern engineering physics and materials property as well.	3	2/2

**UH6524001-CHEMICAL ENGINEERING**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KC12603	Chemical and Bioprocess Technology	Chemical engineers are involved in the design, modification and operation of processes to produce desirable products. This course will describe the role of the chemical engineer in chemical and bioprocess industries based on SDGs. In this course, the sustainability concept and best engineering practices will be introduced during the production process of several industries including palm oil, petrochemical, textile, leather, pulp & paper and cement as well as bioprocess. Finally, concept of process intensification and process development will be introduced.	3	1/2
2	KC23203	Bioprocess Principles	Bioprocess principles involves a study of the biological and biochemical principles supporting the field of bioprocess engineering. It will be expected that students develop an understanding of the science and engineering principles underlying modern industrial practice in bioprocessing. For an engineer to solve problems in bioprocesses, the understanding of microbiology and its related technology is prerequisite. Hence, this course is aligned to equip engineering students with bioprocess fundamental.	3	2/2
3	KC34203	Project Management and Process Economics	This course will help the students to grasp the required concepts in developing and managing a project. These include understanding the life of a project, project planning and control and the workforce behind a successful project. Students will also be exposed on a proper project planning and scheduling as well as project communication and documentation. Topics such as project manager and project team will provide an overview of leadership ability and management skills to students.	3	3/2
4	KC09903	Management and Accounting for Engineers	This course is a prerequisite for the completion of the degree Chemical Engineering of the Universiti Malaysia Sabah. It touches on engineering management aspects from the accounting perspective. An engineer needs to understand different approaches in planning, organisation, control and performance measurement as support in the process of product manufacturing and the provision of services. This course will also take a general approach in introducing the function of financial statements, taxation and audit, as well as financial information analysis and its relevance to the engineering discipline and professional environment. Emphasis is given to cost management techniques, decision-making techniques and the provision of engineering information in a financial format as a form of management support with an introduction to General Management and Project Management.	3	4/2

**UH6521001-MECHANICAL ENGINEERING**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KM10203	ENGINEERING MATERIALS	An introductory course in applied science examining the fundamentals of Atomic structure, crystal structures, defects in metallic structure, plastic deformation of metals, binary alloys, constitution and equilibrium diagrams, the iron-carbon equilibrium diagram. Ferrous and non-ferrous alloys, their manufacturing and engineering applications. Mechanical behaviour of engineering materials, testing of materials, heat treatment of steels, surface modification of metals for specific engineering applications, tribological properties of metals and non- metals.	3	1/2
2	KM20603	NUMERICAL METHODS	This course serves as an introduction to the numerical methods used to solve mathematical problems in engineering practice and that are often impossible to solve analytically. They are formulated so that they can be solved with arithmetic operations and can be implemented on computers.	3	2/2
3	KM32003	FINITE ELEMENT METHOD	This course introduces the concept of finite element method (FEM) in modelling and solving the practical engineering problems. The course emphasizes the solution of real-life engineering problems using the finite element method underscoring the importance of the choice of the proper mathematical model, discretization techniques and element selection criteria. The course covers the principle of FEM, direct stiffness method, derivations for prismatic bar under axial loading, truss structure, bending of beam, plane stress & strain, and thermal-fluid related applications.	3	3/2
4	KM42203	SURFACE ENGINEERING	Recent advances in surface engineering and coating technologies have led to the development of a new breed of nano-structured and/or -composite coatings that can meet the increasingly multifunctional application for future mechanical systems. Some of these coatings are truly super-hard and lubricious, hence are well-suited for demanding transportation and green manufacturing applications. Surface treatment methods are now combined with multilayer coating architectures to meet the steeply increasing application of critical engine parts and components. Furthermore, new generation of nano-structured diamond, diamond-like carbon, and derived carbon films are also available for various advanced microelectronics, biomedical and optical applications. Aside coating, texturing is utilized to modify the texture of a surface for improving the tribological performance by various patterns within a certain range of scale. The primary goal of this course is to provide a comprehensive overview of the latest developments in surface engineering including coating and texturing technologies covering various techniques, principles, and applications.	3	4/2

UH6523002-ELECTRONIC ENGINEERING (COMPUTER)					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KS18003	DATA STRUCTURES & ALGORITHMS	This course is aimed at acquainting students with structures used in C++ for the storage and manipulation of data. The concept of data abstraction and the problem of building implementations of abstract data types are emphasized. Both static and dynamic implementations of major structures are presented and the advantages and disadvantages of each are discussed. Structures include lists of several types, stacks, queues, trees, binary trees, B-trees, and graphs. Recursion and key transformation (hashing) are examined. Students are encouraged to examine algorithms and to make judgments about the practical and social application of these algorithm concepts to large scale programming projects; the course stresses the importance of quantitative methods in designing software.	3	1/2
2	KS22603	COMPUTATIONAL METHODS	As the need to increase the understanding of real-world phenomena grows rapidly, computer-based simulations and modeling tools are increasingly being accepted as viable means to study such problems. Employment of higher-level programming and visualization tools, such as MATLAB, reduces burdens on programming and introduces a powerful tool set commonly used by industry and academia. A consistent theme throughout the course is the linkage between the techniques covered and their applications to real-world problems.	3	2/2
3	KS23202	OPERATING SYSTEMS	Operating systems are the main central to computing activities. An operating system is a program that acts as an intermediary between a user of a computer and the computer hardware. The main tasks of operating systems are to manage resources such as CPU time and memory and to manage the users and software.	2	2/2
4	KS22402	ENGINEERING PHYSICS	This course is an introductory course which will cover three main topics which are: Mechanics, Thermodynamics, and the principles of electromagnetism. The course begins with a general introduction to the law of physics, and then to mechanics. General topics on electromagnetic principles will be covered next. The last topic will be on thermodynamics. Thermodynamics laws will be covered as much as possible.	2	2/2
5	KS30403	CONTROL SYSTEM	This course provides an overview of image processing by introducing to students the fundamentals of related algorithms and their implementations to solve real world problems.	3	3/2
6	KS32403	COMPUTER ARCHITECTURE	This course provides a foundation of how computers work for students. This course also introduces available methods to improve the performance of computers and computer software, as well as discusses issues related to modern processors.	3	3/2
7	KS42803	IMAGE PROCESSING	This course provides an overview of image processing by introducing to students the fundamentals of related algorithms and their implementations to solve real world problems.	3	4/2

**UH6524002-OIL AND GAS ENGINEERING**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	KG12303	Introduction to Oil and Gas Engineering	This course introduces students to various disciplines in oil and gas engineering. The contents of the course includes the origin, migration, accumulation and the exploration of petroleum, the types and properties of reservoir rocks and reservoir fluid, and type of formation evaluation. This course also briefly discuss the operation and equipment used in drilling, well completion and production of petroleum.	3	1/1
2	KG32103	Drilling Engineering	The aim of the course is to provide students with a fundamental understanding of petroleum well drilling procedures, its mechanics, and design methodology. The course gives an overview of drilling rig operations and related equipment; offshore drilling and advanced drilling tools; drill-string design; drill bit technology; drilling hydraulics; drilling mud design; pore pressure and fracture pressure calculations; basic casing design; basic well control; well planning.	3	3/1
3	KG32703	Reservoir Simulation	This course includes derivations of basic equations and underlying principles used in developing reservoir simulators. It covers the development of a simple governing equation, partial differential equations for single-phase and multiphase flow in porous media. Finite difference approximations are used to solve the equations. Input data requirements and applications of simulation models for history matching and prediction of field performance will be discussed. A spreadsheet, i.e. Microsoft Excel, would be used for many of the examples and exercises.	3	3/1
4	KG12603	Reservoir Rock and Fluid Properties	This course introduces students to the important concepts, theories, and methods of properties determinations (calculation, correlation, and laboratory method) of some reservoir rock and fluid properties. The topics in reservoir rock properties include porosity, permeability, fluid saturation, rock compressibility, rock wettability, relative permeability, capillary pressure, and electrical properties of reservoir rocks. In reservoir fluid properties, the topics cover one and two-phase behaviors of both ideal and real systems, gas properties, liquid properties and reservoir fluid properties.	3	1/2
5	KG22603	Reservoir Engineering	The course provides an understanding of the underlying value and limitations of the analyses provided by reservoir engineers, as well as a better understanding of the required data and assumptions involved in the practice of reservoir engineering. Participants will obtain an understanding of routine reservoir engineering calculations, the data required to perform these calculations, the primary tools and techniques used by reservoir engineers, and the information gained by the application of those techniques. The limitations of the extrapolation of the results to the decision making process will also be covered. Throughout the course, the impact of the data, assumptions and technical limitations are related to the economic impact they have on reservoir management.	3	2/2
6	KG32003	Downstream Processing	The purpose of this course is to explain the need for petroleum refining and provide a basic understanding how a petroleum refinery works. It also introduces and reviews the physical and chemical processes used to convert crude oil into desired products. In addition the course also looks into the future prospects of oil refinery with its implications on environmental, technical, and economic constraints.	3	3/2
7	KG32203	Production Engineering	This course introduces students to complete petroleum production system of a petroleum well/field. The course	3	3/2

			will provide an overview of the well/field petroleum production system components including production philosophy and objectives, present and future well productivity and performance, single and multiphase flow system for surface delivery, artificial lift system and surface facilities.		
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## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTANCY

UH6345001 - ENTREPRENEURSHIP					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BT22003	Entrepreneurship	This course exposes students to the basic entrepreneurial concepts and the key principles of business operations, such as developing successful business idea through effective business model, preparing proper ethical and legal aspects for starting and managing a business, planning and managing resources (finance and physical assets), undertaking effective marketing communications and preparing for future growth for a business. The course particularly focuses on student's experiential entrepreneurial learning where students are required to take up own business that embeds digital marketing communication techniques, namely teaser, soft-sell, hard-sell and digital sales posting using digital tools like Facebook, Instagram and WhatsApp.	3	2/2

UH6314001 - PLANNING & DEVELOPMENT ECONOMICS					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BC30503	International Trade & Development	This course is designed to provide an introduction to the theory and practice of international trade and economic development. The main focus of this course will be on the effect of trade policy to the economic development (i.e., Trade Liberalization, Poverty and development, The World Trade Organization, Trade and Changing World, The Globalization of Trade, Finance and Resistance). In this course we will review some of the current issues surrounding trade and development, review the relevant trade and development concepts and examine the empirical findings.	3	3/2

UH6343001 - FINANCIAL MANAGEMENT & BANKING					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BT12503	Financial Management	This course is an introduction course in the field of finance. It covers the main idea in finance that starts with a general background, conceptual framework and techniques to assist in managing financial decisions. The main focuses are towards fundamental principal, exercises and modern financial management procedures. This subject will provide students the guidance in making personal, corporate, financial and investment decisions, as well as giving them the basic understanding in the field of finance.	3	1/2
2	BD31603	Bank Management	Bank Management is a key component of the global economy. As an economic activity, it is central to the flow of capital around the world through provision of loans, the supply of financial advice and its involvement in securities markets. This course will provide an insight of issues arising from the Bank Management, which has been a growing trend since the 1960s. Therefore, the students will acquire a solid understanding of recent development of Bank Management as well as the future.	3	3/2

**UH6811001 - HOTEL MANAGEMENT**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BE33103	Fundamental to Hospitality Management	The introductory course provides initial exposure of the vast scope of the hospitality industry that comprises various food establishments, lodging sectors and recreational and leisure theme parks alike. In addition, students will also be exposed to the structure, nature and operating characteristics of these different sectors of the hospitality industry. The holistic nature of this course provides insights on the nature of various career prospects in the hospitality industry and would assist students in shaping their expectation on the reality of this fascinating industry.	3	3/2

**UH6345002-INTERNATIONAL BUSINESS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BA21003	Intro to International Business	This course aims to provide an overall idea of the scope of international business compared to domestic business. Students will analyse the global environment by determining the opportunities, challenges and complexities faced by companies operating in the international arena. Students will conduct country analysis to identify the similarities and differences between countries and determine the opportunities and risks of specific countries. Appropriate entry strategies for companies that plan to go international will also be identified and discussion on how companies that operate internationally are included.	3	2/2

**UH6342001-MARKETING**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BG20103	Consumer Behaviour	Consumer behavior is a fascinating field that studies individuals, groups and organizations and the processes they use to select, secure and dispose of products, services, experiences or ideas. Consumer behavior blends psychology, sociology, social anthropology, economics and marketing so as to understand the decision-making processes of buyers. This course examines a wide range of consumer behavior concepts, models and emerging trends that are essential to the marketing success of today's commercial firms, non-profit organizations and government institutions alike.	3	2/2

**UH6812001-TOURISM MANAGEMENT**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BY10203	Introduction To Tourism	Introduction to Tourism an introductory course which introduces the key concepts that tourism student will need to understand the complexity of tourism. Students will be able to identify the main sub sectors. Besides that, the focus is also on the operating characteristics, trends and issues that dominate tourism specifically upon attractions, accommodations, intermediaries, transportation, public sector and destination.	3	1/2

**UH6314002-FINANCIAL ECONOMICS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BF30703	Islamic Financial Economics	This course is the basic introductory to Islamic economics and financial economics especially in the area of finance and banking. It discusses the concept and application in Islamic finance and gives exposure to the students on how Islamic teaching perceives the financial systems and its functions. Among the discussed concepts and issues in this course are scarcity and resources, surplus and deficit sectors, riba, hibah, Trade, al-bay', BBA (Al-Bay Bithaman Al-ajil), Mudharabah, Musyarakah, Islamic capital and bond market, and also Islamic banking and finance products such as al-Tijarah, al-Murabahah, al-Salam, al-wadiah, al-istisna', ar-Rahn, al-Hiwalah, al-wakalah, al-kafalah, takaful dan al-ijarah. This course also discusses the role of Baitul Mal and zakat.	3	3/2

**UH6314003-HUMAN RESOURCE ECONOMICS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BH20303	Labour Economics	This course is designed to provide an introduction to the theory and practice of contemporary labour economics. The primary focus of this course will be on developing an understanding of the determinants of wage rates and employment levels in labour market. The analytical tools of neoclassical economics will be used to examine contemporary policy issues. Topics of discussion include supply and demand of labour, labour market equilibrium, wage determination and structure, and migration.	3	3/1

**FACULTY CORE (FOR ALL PROGRAMS)**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	BT21303	Organisational Behavior	This course will enrich students' knowledge about the concepts and issues of human behaviors in organisations. Organisational behavior is closely linked to human behavior, at individual, group and organisational level. The main goal of the course is to enable students as future managers to understand organisational behavior as a mechanism to improve productivity, motivation, satisfaction and performance besides reducing negative work behaviors.	3	2/2
2	BT22303	Human Resource Management	The course is designed primarily for the undergraduate course. It is intended for students who are being exposed to HRM for the first time. The course is designed to get students to be in touch with the field using numerous examples and company material and will reinforce the notion that, by definition, all managers are necessarily involved with HR. The course provides helpful insights for those students who aspire to management positions. The course is divided into six major parts: Part 1: Overview of HRM, Part 2: staffing, Part 3: performance management and training, Part 4: compensation, Part 5: labor & employee relations, safety and health, and Part 6: operating in a global environment.	3	2/2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF SUSTAINABLE AGRICULTURE (SANDAKAN CAMPUS)

UH6621001-CROP PRODUCTION					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	*YEAR/ SEMESTER
1	RC10403	AGRICULTURAL BIOCHEMISTRY	Agricultural Biochemistry will provide an introduction to the subject of biochemistry from a perspective that will be particularly applicable to agricultural students. It will focus on the chemistry of plant metabolism, the biomolecules that are involved in these pathways, and discuss the importance of biomolecules in processing of nutrients.	3	Year 1/ Semester 2
2	RC10603	SOIL SCIENCE	This is a fundamental soil science course which introduces students to the basic physical, chemical, biological and morphological properties of soils and functions in relation to agriculture. Emphasis will be placed in the context of tropical conditions with particular reference to Malaysian soils. Soils will be perceived as a product of various processes acting over time on parent materials. The wide variety of soils resulting from the soil-forming processes and their classification using the standard USDA and local (Malaysian) soil classification systems will be highlighted. The importance of appropriate management and land use practices to ensure conservation and sustainability for agriculture will be discussed.	3	
3	RC10803	SEED SCIENCE AND TECHNOLOGY	Today's agriculture depends on the efficient supply of quality seed at any time. Seed quality is recognized as one of the major factors that determine the success or failure of a crop. In this course; seed development after fertilisation, seed structures and dispersal are taught. The physiology of seed germination, viability tests and seedling vigour are highlighted. Categories of seeds conditioning for human consumption, livestock feeds and as planting materials, seed production, collection, cleaning, processing, and storage (of orthodox and recalcitrant seeds) and cryo-preservation are included. Seed testing laboratories and protocol for seed purity and standards set by A.O.S.A. are included. Seed certification for commercial seed producers and the network in seed trade are integral parts of the course.	3	
4	RC11003	GENETICS	This course introduces the principles of inheritance. The topics include cellular reproduction, transmission pattern of inheritance (Mendelian, non-Mendelian, complex traits), the molecular basis of inheritance, and population genetics. The sources of genetic variation and the significance of genetic diversity in sustainable agriculture will also be discussed.	3	
5	RC21003	BIOMETRY	This course focuses on statistical analysis and its application in agriculture. The course will show how statistics are being used to evaluate the agricultural research results. The course will cover both descriptive statistics, which elaborate on the data obtained in research, and inferential statistics, which are used to decide whether the results of research confirm the researcher's hypotheses. Specific topics to be covered include sampling and estimation, hypothesis testing, z-test, t-tests, chi-square, analysis of variance, correlation, regression analysis, and non-parametric methods of statistical analysis.	3	Year 2/ Semester 2
6	RC21203	PLANT PATHOLOGY	The course will begin with a brief introduction to plant pathology and its importance. Biotic agents (bacteria, fungi, viruses, nematodes, etc.) and some abiotic agents that cause plant diseases will be highlighted. The disease cycle, the physiological response of plants to pathogen attack, the role of genetics in disease infection, the mechanism of infection and the mechanism of defence against plant pathogens will be detailed. Disease	3	

			symptoms and control methods (chemical, cultural, biotechnology) will also be highlighted. The concept of plant disease diagnostic procedures in the field and laboratory is also taught in practical sessions.		
7	RC21603	FARM MECHANIZATION	This course introduces the principles in the design, construction and operation of farm machinery for various tasks to be performed in the farm. Farm mechanization for land preparation, seeding, planting, crop care, harvesting and processing will be covered. The construction, operation and maintenance of some common farm machineries will be discussed. Financial costing and accounting of agricultural machinery and analysis of factors affecting economic operation for effective management decisions will be covered.	3	
8	RC21803	CROP PEST MANAGEMENT	This course will familiarize the students with skills and knowledge on crop pest management. Pest control measures that may be performed as part of an integrated pest management strategy will be introduced. Control of agricultural pests including biological, cultural, pesticides and physical, and general methods (poisoned bait, fumigation, sterilization etc.) will be exposed to students.	3	
9	RC22003	RICE PRODUCTION	This course focuses on the importance of rice as an important food crop and discusses the yield and production of the crop in Malaysia and the rice-growing countries. The course also covers the environments in which rice grows, specifically the types of landscape and soil, climatic conditions and the growth and development stages of the plant. Both wetland paddy cultivation and upland hill rice will be discussed in the course. The management practices and infrastructure requirements related to the cultivation of rice and post-harvest handling, storage and processing of grains will be discussed.	3	
10	RC30402	CEREAL CROPS	This course will cover the management practices and infrastructure requirements related to the cultivation of major cereal crops such as rice, maize, sorghum and others. Post-harvest handling, storage and processing of products will be mentioned. Utilisation of crop products for human consumption, snack food industries and industrial applications are taught.	2	
11	RC30602	ROOT CROPS	This course emphasizes the classification, ecology and methods of propagation and planting of root crops such as tapioca, sweet potatoes, potatoes, taro, yams and others. The management, harvesting, and processing of tubers into starch are discussed. Utilisation of tubers and starch for food, confectionery, snacks and industrial applications are highlighted.	2	
12	RC30802	OIL PALM MANAGEMENT	An overview of current global issues related to the sustainable palm oil industry will be highlighted, and focus will be given on the industry in Malaysia. This course covers the biological and physiological aspects of oil palm, nursery management, land clearing and preparation, infrastructure development, field planting, immature and mature oil palm management, pests and diseases, intercropping and integration, and technologies involved in the production. Good and sustainable practices in oil palm cultivation and palm oil production and management will be emphasised. In addition, students will be able to gain hands-on and industrial experience through practical and field visit sessions.	2	
13	RC31002	SOILLESS CULTURE	This course provides students with a good background of principles, practices, techniques, infrastructures and technologies of growing plants without soil. It covers species in several important systems such as water culture, sand culture, gravel culture, aeroponics, tube culture, nutricare, etc. Management of soilless culture production systems will be discussed including the use of organic, inorganic production and vertical farming.	2	
14	RC31102	HERBS AND SPICES CROPS	Traditionally herbs and spices are used as fragrant, flavor delicious, aromatic and medicinal plants. Everyone can smell, eat, bath in, and heal with them. One of the most important uses of herbs and spices is cancer fighting. Herbs and spice business is one of the backbones of the	2	

			economy of Malaysia. In this course, students will learn the progress of industry, identification and classification, propagation and cultivation, harvesting, and post-harvest technique of herbs and spices crops in Malaysia. They will also learn the latest techniques on propagation, cultivation, production, and some phytochemical analysis techniques of herbs and spices.		
15	RC31202	LEGUME AND MISCELLANEOUS CROPS	The botany of grain legumes (groundnut, soybean, etc) and miscellaneous crops (kenaf, jatropha etc) are outlined. The importance of legumes in nitrogen fixation; the grain for food, and animal feed are emphasized. Discussions include planting practices and crop maintenance, harvesting and storage of the produce. Intercropping of legumes with other food crops and the use of legume plant residue for green manure are included. Utilization of legume grains and other products are stressed.	2	
16	RC31302	SMALL AND MEDIUM ENTERPRISE MANAGEMENT	This course focuses on how entrepreneurs of small and medium size enterprises (SMEs) perceive the processes associated with strategic management, what decisions and actions they adopt to ensure competitive advantage, how business strategies are formulated and implemented in SMEs, and the strategic role of entrepreneurship within small businesses. The course also discusses how SMEs should operate for maximum competitive advantage, and consider the gap between ideal theory and practice. Policy issues and challenges facing the SMEs in Malaysia also covered in this course. By the end of the course students should be able to understand most of the strategic management process of SMEs.	2	
17	RT30103	AGRICULTURE EXTENSION	This course teaches students on the concepts, philosophy and methodology of agricultural extension. They would also be exposed to the scope of agricultural extension. They would also undertake practical extension training/fieldwork in a number of communities and report their personal experiences during those training.	3	

**\*Choose courses within the same year only.**



**UH6621002-HORTICULTURE & LANDSCAPING**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	*YEAR/ SEMESTER
1	RH10203	PLANT PHYSIOLOGY	Plant physiology is an examination of plant function ranging in complexity from individual cells up to the whole plant. As relatively immobile organisms, plants must adapt to the prevailing environment and consequently have unique mechanisms to deal with non-ideal growing conditions. Both normal growth and development as well as how the plant responds and adapts to adverse conditions are major themes in plant physiology research. This course will focus on the major physiological processes occurring in plants grown under ideal conditions as well as touch on the physiological adaptations under stress conditions.	3	Year 1/ Semester 2
2	RT10203	GENETICS	This course introduces the principles of inheritance. The topics include cellular reproduction, transmission pattern of inheritance (Mendelian, non-Mendelian, complex traits), the molecular basis of inheritance, and population genetics. The sources of genetic variation and the significance of genetic diversity in sustainable agriculture will also be discussed.	3	
3	RT10403	SOIL SCIENCE	This is a fundamental soil science course which introduces students to the basic physical, chemical, biological and morphological properties of soils and functions in relation to agriculture. Emphasis will be placed in the context of tropical conditions with particular reference to Malaysian soils. Soils will be perceived as a product of various processes acting over time on parent materials. The wide variety of soils resulting from the soil-forming processes and their classification using the standard USDA and local (Malaysian) soil classification systems will be highlighted. The importance of appropriate management and land use practices to ensure conservation and sustainability for agriculture will be discussed.	3	
4	RC20203	WEED SCIENCE	This course is a study of weeds and their control. Principles including weed plant classification, weed biology and ecology, and plant and herbicide chemistry will be taught. Practices which prevent, control and eliminate weeds will be discussed. Herbicide formulations and safe herbicide use will be taught.	3	Year 2/ Semester 2
5	RC20403	CROP PEST MANAGEMENT	This course will familiarize the students with skills and knowledge on crop pest management. Pest control measures that may be performed as part of an integrated pest management strategy will be introduced. Control of agricultural pests including biological, cultural, pesticides and physical, and general methods (poisoned bait, fumigation, sterilization etc.) will be exposed to students.	3	
6	RH20603	TURF MANAGEMENT	This course provides and shares knowledge and skills on planting and maintenance of turfgrass. The lecture and practical will cover topics on importance of turfgrass and its associated industry, types of turfgrass in Malaysia, identification, selection, planting, primary maintenance, and secondary maintenance of turfgrass. This course will also cover turfgrass management for golf course, urban landscape and recreational areas.	3	
7	RT20203	AGRICULTURAL MICROBIOLOGY	This course offers the basic knowledge on microbes and their roles in ecosystems. The early parts of the topics are related to morphology and structures, microbial diversity, metabolisms, growth, and genetics. Later parts of the course will cover applied aspects of microorganisms in agriculture, such as the manipulation of microbial plasmid in genetic engineering for enhancement of crops and livestock production, and roles of microbes in soil, environment, ecology, biogeochemical cycles, and foods. Few basic techniques essential in microbiology will be taught in practical sessions.	3	
8	RT20603	INTRODUCTION TO AGRICULTURAL ENGINEERING	Students will learn a wide range of fundamental engineering concepts, principles and applications in agriculture (from land preparation to post-harvest) with a strong emphasis on problem solving. Aspects of mechanics, hydraulics, electric	3	

			and electronics will be covered. The principles and applications of internal combustion engines, electric motors and pumps will be discussed.		
9	RT20802	INDUSTRY REVOLUTION AND BIOMETRY	This course will introduce and expose the student to the concept and fundamental pillars of IR4.0. The student will also be introduced to statistical analysis and its application in agriculture. The course will show how statistics are being used to evaluate the agricultural research results. The course will cover both descriptive statistics, which elaborate expose the student to the concept and fundamental pillars of IR4.0, particularly expose the student to the concept and fundamental pillars of IR4.0, particularly the data obtained in research, and inferential statistics, which are used to decide whether the results of research confirm the researcher's hypotheses. Specific topics to be covered include sampling and estimation, hypothesis testing, t-tests, analysis of variance, correlation, regression analysis, and non-parametric methods of statistical analysis.	2	
10	RC31002	SOILLESS CULTURE	This course provides students with a good background of principles, practices, techniques, infrastructures and technologies of growing plants without soil. It covers species in several important systems such as water culture, sand culture, gravel culture, aeroponics, tube culture, nutricare, etc. Management of soilless culture production systems will be discussed including the use of organic, inorganic production and vertical farming.	2	Year 3/ Semester 2
11	RC31102	HERBS AND SPICES CROPS	Traditionally herbs and spices are used as fragrant, flavor delicious, aromatic and medicinal plants. Everyone can smell, eat, bath in, and heal with them. One of the most important uses of herbs and spices is cancer fighting. Herbs and spice business is one of the backbones of the economy of Malaysia. In this course, students will learn the progress of industry, identification and classification, propagation and cultivation, harvesting, and post-harvest technique of herbs and spices crops in Malaysia. They will also learn the latest techniques on propagation, cultivation, production, and some phytochemical analysis techniques of herbs and spices.	2	
12	RC31302	SMALL AND MEDIUM ENTERPRISE MANAGEMENT	This course focuses on how entrepreneurs of small and medium size enterprises (SMEs) perceive the processes associated with strategic management, what decisions and actions they adopt to ensure competitive advantage, how business strategies are formulated and implemented in SMEs, and the strategic role of entrepreneurship within small businesses. The course also discusses how SMEs should operate for maximum competitive advantage, and consider the gap between ideal theory and practice. Policy issues and challenges facing the SMEs in Malaysia also covered in this course. By the end of the course students should be able to understand most of the strategic management process of SMEs.	2	
13	RH30602	FLORICULTURE AND ORNAMENTALS	This course discusses identification, usage, propagation, and cultural requirements of flowering plants, trees, shrubs, vines, and ground covers used in Malaysian landscapes. It also includes the physiological principles and commercial practices involved in the production of potted and bedded plants, as well as greenhouse production systems.	2	
14	RH30803	LANDSCAPE DESIGN	This course provides students with an understanding and application of principles and elements of landscape design. Theory and practices of landscape design from around the world are introduced; with the focus on parks and sustainable design strategies.	3	
15	RH31002	POMOLOGY	This course provides knowledge on aspects of fruit production from planting to harvesting with special emphasis on local fruits. Discussion will include collection and cultivation of potential indigenous fruit species for future propagation and breeding purposes.	2	
16	RH31102	LANDSCAPE CONSTRUCTION AND MANAGEMENT	This course emphasizes on the second stage of landscape improvement; from preconstruction activities to details of works associated with landscape construction. It features the opportunity for students to get hands-on training on small-scale landscape construction and management	2	



			projects.		
17	RT30103	AGRICULTURE EXTENSION	This course teaches students on the concepts, philosophy and methodology of agricultural extension. They would also be exposed to the scope of agricultural extension. They would also undertake practical extension training/fieldwork in a number of communities and report their personal experiences during those training.	3	

**\*Choose courses within the same year only.**

**UH6622001-LIVESTOCK PRODUCTION**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	*YEAR/ SEMESTER
1	RL10603	SOIL SCIENCE	This is a fundamental soil science course which introduces students to the basic physical, chemical, biological and morphological properties of soils and functions in relation to agriculture. Emphasis will be placed in the context of tropical conditions with particular reference to Malaysian soils. Soils will be perceived as a product of various processes acting over time on parent materials. The wide variety of soils resulting from the soil-forming processes and their classification using the standard USDA and local (Malaysian) soil classification systems will be highlighted. The importance of appropriate management and land use practices to ensure conservation and sustainability for agriculture will be discussed.	3	Year 1/ Semester 2
2	RL10803	ANIMAL NUTRITION	This course will introduce students the importance of nutrition in farm animal, principles of nutrition in getting maximum output from farm animals. The common feed being used in the industry in feeding ruminants and monogastrics will be introduced. The topics will highlight the importance of each nutrient in animal feed and their digestion and metabolism. This course will also discuss the basic sciences and principles in evaluation of animal feedstuff, especially during practical session and relate it to the livestock industry of the country.	3	
3	RL11003	ANIMAL MICROBIOLOGY	This course offers the basic knowledge on microbes and their roles in ecosystems in general. The microbes which are more relevant and encountered in the field of livestock production will be introduced. The first part of the lectures are related to morphology and structures, microbial diversity and growth. Microbial genetics and the manipulation of microbial plasmid in genetic engineering for enhancement in various field, including animal production are discussed. Roles and importance of microbes in biogeochemical cycles, environments, food production and bioremediation are explained.	3	
4	RL21003	INDUSTRY REVOLUTION 4.0 AND BIOMETRY	This course will introduce and expose the student to the concept and fundamental pillars of IR 4.0. The student will also be introduced to statistical analysis and its application in agriculture. The course will show how statistics are being used to evaluate the agricultural research results. The course will cover both descriptive statistics, which elaborate the data obtained in research, and inferential statistics, which are used to decide whether the results of research confirm the researcher's hypotheses. Specific topics to be covered include sampling and estimation, hypothesis testing, t-tests, analysis of variance, correlation, regression analysis, and non-parametric methods of statistical analysis.	3	Year 2/ Semester 2
5	RL21403	ANIMAL REPRODUCTION	This course will present basic principles of reproduction in livestock species to provide knowledge on reproductive biology. The emphasis will be on the application of this information toward understanding the reproductive system and solving problems in reproduction. Topics covered are such as comparative structure and function of male and female reproductive systems; endocrine, neuroendocrine and environmental control of reproduction; development of the gametes, embryo, foetus and placenta; and pregnancy and parturition.	3	
6	RL21603	FARM MANAGEMENT	This course is a basic introduction to the principles of farm management. Like any other economic problem, farm management implies a rational resource allocation on the uses of scarce farm resources, having alternative uses to acquire farm objectives and maximum household utility. Farm management analysis uses information from other disciplines and put them into economic planning framework. In other words, it seeks to help the farmer deciding problems like: what to produce, how much to produce, how to produce and when to buy and sell and	3	

			what organization and managerial problems relating to these decisions.		
7	RL22003	LIVESTOCK FEED AND FEEDING	This course will introduce students the common feeds for livestock in the country, the feed industry and the production of livestock feed in the country so that it can be efficiently used by the ruminant and monogastric animals. Conventional and non-conventional feed resources will be shared and the processing of these resources into useful animal feed will be explained. The various methods, equipment, machinery as well as technology in producing, processing and even preservation of feed will be discussed with the students. The second part of the course will cover more on the feedings of those feed to the animals. Students will be exposed to the methods of handling, HACCP and certification of processed and quality feed.	3	
8	RL22203	SWINE PRODUCTION	This course introduces the aspects of swine production and practices including breeding, nutrition, management, housing, equipment, health and welfare in the current production system. Emphasis is also will be on breeds, selection and judging, housing and equipment and marketing of pork.	3	
9	RL30402	LIVESTOCK SELECTION AND EVALUATION	The course will introduce students the principles and concepts of selection and evaluation of animals. It will include the various method of selection and evaluation which being practiced in the livestock production. The course will include identification of physical characteristics of different types of livestock.	2	Year 3/ Semester 2
10	RL30403	BEEF AND DAIRY PRODUCTION	This course includes important aspects of dairy and beef cattle management from birth to adult, various breeds of dairy and beef cattle, selection and judging dairy and beef cattle. It will include breeding, nutrition and management, milking management, dairy herd health, dairy housing & equipment, marketing of milk, beef cattle health management, beef cattle housing and equipment and marketing of beef.	3	
11	RL30603	ANIMAL DISEASE AND HEALTH CARE	This course deals with common diseases (infectious and non-infectious) of livestock, aetiology, symptoms, effect on animal production, treatment and prevention. It will include topics such as proper handling and care of animals, hygiene, sanitation, vaccination schedule, immunization, and health monitoring.	3	
12	RL30702	ANIMAL ENVIRONMENTAL PHYSIOLOGY	This course deals with various aspects of the effects of the environment on animal physiology and stress on production and health, factors responsible for adaptation in various environments. Attention will be emphasized on the problems associated with the improvement of livestock production in tropical climates. This course aims to develop an understanding of the environmental needs of animals including climate, social stress and shelter requirements and it should enable students to appreciate the use of animal behaviour as a measure of stress and welfare.	2	
13	RT30103	AGRICULTURE EXTENSION	This course teaches students on the concepts, philosophy and methodology of agricultural extension. They would also be exposed to the scope of agricultural extension. They would also undertake practical extension training/fieldwork in a number of communities and report their personal experiences during those training.	3	

**\*Choose courses within the same year only.**

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF PSYCHOLOGY AND EDUCATION

UH6311003-COUNSELLING PSYCHOLOGY					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	PK10103	Principles and Philosophy of Counselling	This course will provide a comprehensive overview of counselling services which include the historical aspects, backgrounds, requirements, definitions, philosophies, principles, goals, models, processes, and approaches in counselling. This course also provides knowledge and emphasis on basic counselling skills, counselling relationships, types of counselling and client types. Issues in counselling such as ethics, counselor training, licensing, counselor effectiveness, research and evaluation are also been taught.	3	1/2

# LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

## FACULTY OF MEDICINE AND HEALTH SCIENCES

DIPLOMA IN NURSING					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEM
1	MN20603	Gerontology Nursing	This module will provide students with basic knowledge on the psychological, physiological and sociological changes of aging, the types of health care and community-based facilities for senior citizens.	3	2/2
2	MN21002	Psychology and Counseling	This module enables learners to acquire and apply knowledge and skills in psychology and counselling. Learners will learn how to apply behavioural science theory to understand individual, family and community health behaviours to promote health for risky behaviour change.	2	2/2
3	MN21202	Nursing Informatics	This course trains students with the basic Information Technology (IT) concepts needed for joining nursing course. This course will benefit students who wishes to arm themselves with substantive computer knowledge and skills. This course covers introduction to computers and its architecture, application and software, introduction to multimedia and its application, introduction to internet, healthcare information system, computer in nursing education and research, computer in nursing practice and admin, and electronic communications.	2	2/2
4	MN10404	Medical Surgical Nursing I (Perioperative, Palliative, Communicable Disease And Altered Health Pattern)	This course provides students with a comprehensive understanding of perioperative nursing care, palliative care, communicable diseases, and altered health patterns. It emphasizes the knowledge and skills necessary to deliver safe and effective nursing care to patients undergoing surgical procedures, those requiring palliative support, and those with communicable diseases or altered health patterns. The course combines theoretical instruction, and hands-on practice in clinical skills labs to develop students' competency in assessing patients accurately and performing nursing care procedures safely.	4	1/2
5	MN11202	Pharmacology In Nursing	The Pharmacology in Nursing course provides students with a comprehensive understanding of the principles and safe administration of drugs. It covers various systems of drug classification and naming, drug regulation, important terminology, and the fundamental principles to ensure the safe administration of medications. Through this course, students will gain knowledge in drug dosage calculation, understanding the international system of units, and become familiar with pharmacological terminology and drug classification.	2	1/2

BACHELOR OF NURSING					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	MJ10803	Introduction to Theory and Philosophy of Nursing	This course will provide students with an understanding of selected concepts and theories related to professional nursing practice. Historical, legal, cultural, economic, and social factors that influence nursing and health care delivery are analysed. Various philosophical perspectives on professional nursing practice will be discussed. Nursing theories are addressed as frameworks for practice. Strategies are discussed for analysing and managing ethical dilemmas in nursing and health care.	3	1/2
2	MJ11004	Fundamental of Nursing	This course will prepare the student with the knowledge of nursing skills on basic nursing procedure. Student are exposed to critical thinking skills and problem solving skills while performing the procedures. Students will also be exposed with the process of critical thinking development during performing the basic nursing care, and the opportunity to develop Nursing Care plans within a nursing process framework. The students will be placed in the Clinical Skills lab to acquire basic nursing skills competency.	4	1/2
3	MJ20202	Epidemiology	In this course, the students are exposed to study the causes, risk factors, environmental hazards, epidemiological triads, preventive measures and epidemic situation of health related diseases in specific population settings such as schools, cities, states, countries and global. Students will have the opportunity to explore the control and implement epidemic measures to stop the spread of the diseases.	2	2/2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF TROPICAL FORESTRY

UH6623001- INTERNATIONAL TROPICAL FORESTRY					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	FS20203	FOREST FIRE MANAGEMENT	Forest fires are one of the factors contributing to the destruction and extinction of flora and fauna diversity. In addition, it is also a contributing factor to the occurrence of haze that causes air pollution and thus brings disaster to the environment and human life. However, forest fires also contribute to the displacement process for the dynamics of natural forests. Therefore, this course is very important to learn the basic concepts of forest fire management, particularly forest fires in the tropics.	3	2/2
2	FS20403	SILVICULTURE	This course will cover two areas namely plantation silviculture and natural forest silviculture. Plantation silviculture includes areas in nursery and plantation establishments. Topics on nursery will include types, establishment and management. Plantation silviculture will include aspects of establishment, planting distance, fertilizing, protection, thinning, pruning and rotation. A fundamental of natural forest silviculture practices entails areas such as general silviculture systems in the tropics, development of silviculture in Malaysia and current silviculture system, scope and future challenges.	3	2/2
3	FS30202	FOREST AND WOOD PRODUCTS CERTIFICATION	This course will equip students with knowledge of the development of forest certification initiatives and forest products as an indication that forests are managed sustainably in line with the principles of sustainable forest management. Forest certification emerged in an effort to address environmental issues and awareness of the need for sustainable forest management. There are several institutions involved in forest and forest product certification bodies including at the regional and international levels. The criteria and indicators used in the forest certification process are instruments that can ensure that forests or forest plantations are well managed based on the principles of sustainable forest management. Forest management certification and labeling of traded forests/forest products are identified as approaches to promote sustainable forest management.	2	3/2
4	FS30403	FOREST VALUATION	This course begins with an introduction of the array of goods and services that forest provides, and highlights the need to subscribe to appropriate values in light of competing forest land uses. Recent advances in valuation techniques will be presented in this course using market price approach, surrogate market price approach, production function approach, stated preference approaches and cost-based approach. The strengths and weaknesses of these valuation approaches will be discussed using case studies found in the region.	3	3/2

**UH6852001 - NATURE PARK AND RECREATION**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	FP10403	PARK PLANNING AND MANAGEMENT I	This course is an introductory course to the background establishment and development of protected areas or nature parks such as national park and wildlife sanctuary. The initial discussion will include topics on historical aspects, concept and park categories. Other relevant topics such as various framework examples, agreements, laws and policies both at national and international level will also be discussed. Based on relevant study cases, issues of park establishment in the perspective of land use at regional scale, as well as social issues on park planning and management, related to local community will be given more attention during further discussion.	3	1/2
2	FP10203	FOREST HYDROLOGY	This course will expose students to the field of physical hydrology in the forest ecosystem. Detailed discussion on the water cycle components will help students to understand the importance of each process involved, and be able to apply the knowledge further in the management of forest or specifically in water catchment areas. Students will also be trained to do hydrological data observation for example, rainfall, interception, infiltration, evaporation and river discharge. Other topics that will also be discussed are variation in the weather, climate change, monitoring and water quality analyses and human impacts on hydrological regime.	3	1/2
3	FP20203	ZOOLOGY AND WILDLIFE MANAGEMENT	Wildlife management is the application of ecological knowledge about vertebrate wildlife populations and relationships with plants and other living organisms to achieve a balance between the needs of humans and wildlife. This course exposes students to the concepts and principles of wildlife management problem solving. After learning the basics of zoology and the factors that lead to the extinction of species, the students will gain an understanding of the selection, design and management of protected areas for wildlife and assess threats to species, methods of management and species protection to minimize the threat of extinction. Students will prepare a management plan for a group to be presented at the end of the semester	3	2/2
4	FP20603	ECOTOURISM	This course aims to introduce the concepts of ecotourism, principles and its practices by exploring the impacts of ecotourism to the environment, community and management. Students are also given the opportunity to experience real community-based and cultural tourism operations to better understand the knowledge through a field trip and case study. On completion, students are able to understand the key fundamental ecotourism concepts and principles to ecotourism practices.	3	2/2
5	FP20803	REMOTE SENSING	This course aims to expose students about the importance of remote sensing in management and planning of forest ecosystems. This course consists of aerial photography and satellite remote sensing. The fundamental principle and usage of aerial photographs to gather information about the forest will be taught. For satellite remote sensing, fundamentals of optical remote sensing will be emphasized. Lectures include data acquisition, pre - processing, transformation and satellite data analysis. Lecturers are accompanied by practical works to ensure better understanding of students on the use of the technologies.	3	2/2



6	FP30202	RECREATION PSYCHOLOGY	<p>This course emphasizes on the society's awareness, recognition and appreciation towards recreation. Psychological aspects are discussed to provide exposure regarding human behavior and how it is closely related with recreation. The main discussion is circulating around appreciation towards the values of recreation in fulfilling human psychological needs, therapeutic recreation values through physical activities, and the aesthetic effects of recreation resources, specifically the forest and natural resources. Apart from the above, leisure activity design, creativity in developing, planning and changing of lifestyle through recreational activities are also critical elements in this course. Current issues in recreation as well as research methodology in this field are also discussed.</p>	2	3/2
7	FP30403	URBAN FORESTRY	<p>Urban Forestry is a specialization within forestry that encompasses the management of naturally occurring and planted trees in urban areas. In this course, students will be given more emphasis on the management of assemblages of trees, more specifically sum of street trees, residential trees, park trees and greenbelt vegetation (includes trees on unused public and private land). It comprises three parts, the importance of trees in cities and how to use them, appraisal and inventory techniques of urban vegetation, planning and management of public vegetation, especially street trees, park vegetation, and forested greenbelts. The principles of tree hazard management are also addressed in the latter part of course.</p>	3	3/2
8	FP30602	TOURISM ECONOMICS	<p>Knowledge and skills in tourism economics are essential in providing the basic concepts and mechanism in the approach of solving business problems such as costing, pricing, revenue, profit and competitive advantage. The main topics of this course include estimation and projection in supply and demand, pricing, valuation, potential profit maximization and cost minimization, exploration of local and regional economic analysis, use of economic analysis, application of occupation and money value in the daily operation of the tourism industry. Economic impact of tourism at the macro-economic as well as micro-level will be also stressed out in the cost and profit analysis. In this course, students are able to learn economic theory and issues related to the tourism industry.</p>	2	3/2

**UH6623002-FOREST PLANTATION AND AGROFORESTRY**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	FL20203	SYSTEMS AND AGROFORESTRY PRACTICES	Basic concepts and principles of agroforestry. Classification of agroforestry systems, practices and technology in middle and tropical areas and the benefits and barriers are discussed as a whole. Assessment of agroforestry projects in the economic, social and environmental issues. Agroforestry diagnosis and design of the project is important in determining the appropriate management practices in the context of the interaction between soil and types of crops.	3	2/2
2	FL20403	FOREST PLANTATION MANAGEMENT	This course will discuss the principles and criteria of forest plantation management and development based on sustainable management. This subject encompasses all aspects in relation to forest plantation maintenance and establishment. Factors affecting forest plantation development and the impact of forest plantation to the socio-economic of local community and biodiversity will be discussed.	3	2/2
3	FL30203	TREE -CROP-SOIL INTERACTION AND NUTRIENT MANAGEMENT	This course discusses the interaction between plants, soils and crops. Students will be exposed to agroforestry systems that involve sharing space below ground and above ground. Trees and plants interact in various ways, including positive and negative interaction effects on the growth of both trees and crops. This course will also discuss the processes involved such as the cycle of soil organic matter, nutrients and water. Practical and appropriate site visits will be conducted.	3	3/2

**UH6543001 - WOOD TECHNOLOGY AND INDUSTRY**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	FK12202	FOREST RESOURCE ECONOMICS	This course covers the principles of economics and concepts such as forest resource assessment of the price market, rate of return analysis, the net present value, and cost-benefit ratio. Supply and demand of timber products such as from even age forest and value of stumpage involved in the harvesting process will also be emphasised. The course will also emphasize the contribution of the forestry sector in the economy to the nation and internationally.	2	1/2
2	FK20903	WOOD QUALITY ENHANCEMENT	This course explains the deterioration of wood (which consists of cellulose, hemicelluloses and lignin) after exposure to the environment. This course also discusses the factors that influence deterioration of wood involving wood destroying agents such as fungi, bacteria and insects (for example wood boring insects and termites) that destroy timber either in green wood or finished products. External factors such as fire and weathering processes that can cause deterioration of wood will also be discussed. This course also discusses methods for improving the performance of wood to prevent the wood from attacks of deteriorating agents. Treatment methods emphasised in this course are divided into two categories namely the wood preservation and wood drying. Wood preservation includes the use of wood preserving chemicals, while the wood drying is to reduce the moisture content of the wood. This course involves laboratory practical training on techniques and preservation treatment and wood drying techniques. Case studies and academic visits will be undertaken to improve the understanding of the skills and effectiveness of the wood treatment.	3	2/2
3	FK30603	MANAGEMENT AND UTILIZATION OF BIOMASS	This course discusses the management and utilization of wood waste from wood-based industries. Wood wastes and solid wastes discussed are semi-solid waste. In this course, the discussion will touch on wood waste management methods based on reduction, reuse and recycling. Development of new products from wood waste is also emphasized in this course. The timber industry produces a lot of biomass, in the wake of knowledge management and use of biomass must be applied to ensure synergy of the timber industry. Practical course is to train students to develop products from wood waste. Case studies will also be given to exposure and increase students' knowledge.	3	3/2

## UH6421001 , CONSERVATION BIOLOGY

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	FB13403	ANIMAL DIVERSITY	This course is an introduction to the facts and principles of animal biology. It surveys the major taxa of the animal kingdom and provides an introduction to animal anatomy, classification, physiology, ecology and evolution. It also provides an introduction to the principles, skills, and applications of biology to majors in science education. It includes a review of the molecular basis of life and the organization of cells and tissues and interrelationships of structure and function in living systems as evidenced by the major animal phyla. Laboratory sessions include examinations of animal morphology, anatomy and lab experiments which include data analysis and report writing.	3	1/2
2	FB24403	ECOLOGY	Introduces ecological processes including concept of niches, habitat, ecosystem, resources, energy and nutrient cycles. Emphasis also on the interaction of organisms (exploitation, mutualism and competition) in an ecosystem, and between organism with the environment such as physical, biotic and chemical factors. The pattern of species diversity and related with the biodiversity conservation also will be discussed. Species adaptation and evolution are included. Extinction, immigration and model of species equilibrium for an area also discussed. This course needs to carry out fieldwork. Mini project and presentations also required to enhance the soft skills of the students.	3	2/2
3	FB24002	BIOGEOGRAPHY	This course provides an overview to the distribution of plants and animals across the surface of the Earth in both a spatial and temporal context. Patterns of species distribution and biodiversity will be examined, as well as the important processes that produce the patterns, at many different scales. Abiotic (e.g. climate, topography, soil), biotic (e.g. competition, dispersal) and historical (plate tectonics, evolution, climate change) factors are the controlling mechanisms that shape these patterns. Upon completion of this course, students should have a much greater appreciation and understanding of the plant and animal life that surrounds them.	3	2/2
4	FB34802	ENVIRONMENTAL SUSTAINABLE DEVELOPMENT	Environmental sustainable development relates to the capabilities in the management of natural resources to gain benefits in ecology, economy and social sustainably. In a multidisciplinary approach, the course introduces the concepts of environmental sustainable development at the local and global levels. The course elucidates various management patterns being applied in sustainable development. The course scrutinizes different depths in environmental sustainable development via case studies. Students who have gone through the course are expected to master the pertinent knowledge and skills, besides to understand the obstacles, current issues and future directions of environmental sustainable development.	2	3/2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF FOOD SCIENCE AND NUTRITION

UH6541002-FOOD SCIENCE AND NUTRITION					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	NT10102	<b>Fundamentals of Food Science and Nutrition</b>	This dynamic course offers a comprehensive introduction to the fascinating world of food science and nutrition, tailored for mobility students. Dive into the exploration of food components, including both macro and micronutrients, and understand their pivotal roles in diets. Experience the exciting intersection of food science and culinary arts as the functionality of these components when used as ingredients. Gain critical insights into food microbiology, focusing on food safety - a vital skill in today's global food industry. The course covers the innovative techniques of food processing and preservation, equipped with knowledge essential for modern food practices. Lastly, delve into the world of nutrition, understanding how food choices impact health and wellness. This course is not just an educational journey; it's a gateway to understanding the science behind what we eat and how it affects our bodies.	2	1/1
2	NP20202	<b>Molecular Nutrition</b>	This introductory course offers a unique blend of advanced genetic concepts and practical nutritional applications. Delve into the fascinating world of gene-nutrient interactions and explore how they impact health and disease, with a special focus on Inborn Errors of Metabolisms (IEMs). This course is richly integrated with pioneering scientific research, providing students with exclusive insights into the latest findings. It's an exceptional opportunity for mobility students to gain a competitive edge in the evolving landscape of nutrition science.	2	2/2
3	NP30502	<b>Nutritional Evaluation of Food Processing</b>	This course discovers the fascinating world of food science, tailored for mobility students seeking a deeper understanding of how food processing impacts nutritional value. Engage with a blend of traditional and cutting-edge processing techniques, uncovering how they transform the macro and micronutrient profiles of foods. This course offers a unique opportunity to explore the intersection of food technology and nutrition, making it an ideal choice for students eager to delve into the evolving landscape of food science.	2	3/1
4	NP30302	<b>Food Security</b>	This interdisciplinary course will provide an introduction and overview of world food security, including social, political, environmental, and economic reasons for malnutrition and food accessibility. The course will cover the definition of food security, the indicators used to measure food security, how it links to nutrition and health as well as to livelihoods, what it is affected by, the consequences of food insecurity, and measures that are taken to mitigate these causes and consequences.	2	3/1

## UH6541001-FOOD SERVICE

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	NF30502	Food service Accounting	The main emphasis of this course is to provide students with financial and management accounting concepts, techniques and tools. This course introduces accounting principles and methods to record transactions using a double entry system. It also introduces the methods to prepare financial statements and the components of financial statements. Some of the topics discussed in this course focus on the roles and responsibilities of management in an organisation. Students will also be exposed to how to provide, interpret and evaluate management accounting information in the decision-making process. Development of managerial decision-making skills is stressed through the coverage of the following topics: cost behaviour, cost-volume-profit analysis, profit planning and budgeting, standard costs and variance analysis, and relevant costs.	2	2/2
2	NT11402	Fundamentals of Marketing	This course aims to provide exposure to the core concepts of marketing as an important function in business to students. This course introduces the marketing concepts and elements of the marketing mix in one practical framework to achieve an understanding of the importance of marketing strategy in fulfilling customer needs for a business organization to maintain its position in a competitive environment. This course also focuses on the introduction of marketing, consumer behavior and the marketing mix, especially on retailing, wholesaling, promotion and marketing ethics.	2	1/2
3	NF10102	Fundamentals of Food Service	This course is regarding basic principles of food service management. The course covers knowledge regarding the history of food service and how it may shape the future of food service, current trends, and other related aspects in managing a food service operation such as procurement, menu planning and food safety.	2	1/1

## UH6541004-FOOD TECHNOLOGY AND BIO PROCESSING

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	NB20502	<b>Food Enzymology</b>	The historical uses of enzymes to make beer, wine, cheese, and bread are fine examples of the industrial exploitation on its catalytic function and selectivity. This course covers the basic and applied aspects of enzymology important to food systems. The basic aspects of the course include the basic enzyme properties, factors that affect enzyme activity and methods of measuring enzymatic activities. In the other hand, the applied aspects focusing on the enzymes used by the food industry and methods or controlling endogenous enzyme activities.	2	2/1
2	NB40802	<b>Meat Science and Technology</b>	This course stresses the importance of both the theoretical and practical aspects of meat products processing. Students will be acquainted with the composition and structure of meat, post-harvest chemical changes in meat, determination of quality of the meat and factors affecting it, equipment, technology and ingredients used in meat products. Factors which affect the carcass quality during processing will also be discussed. Issues like animal handling from an international perspective, slaughter, and management of processing wastes will also be scrutinized.	2	3/2
3	NE40402	<b>Bakery and Confectionary Technology</b>	This course aims to introduce students to the bakery and confectionary technology been used in the food industry today. This involves knowledge of science and technology in bakery / confectionary process, the ingredients, popular produce product, manufacturing methods, the use of machinery and equipment, quality control, packaging, hygiene and sanitation and nutritional aspects. Students are given the opportunity to produce bakery and confectionary products during laboratory practice.	2	3/2
4	NE41402	<b>Marine and Aquaculture</b>	This course applies food science and technology to the handling, processing, storage of marine and aquaculture products. This course covers the sources and characteristics of raw material, quality changing during handling, preservation and processing and their quality characteristics (physical, microbiological and chemical). Knowledge acquired from this course will increase the students' capability to determine suitable methods of technologies involved in the production of various types of marine and aquaculture products.	2	3/2

# LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

## FACULTY OF SCIENCE AND NATURAL RESOURCES

UH6545001 - BIOTECHNOLOGY					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	SY12403	Biochemistry	Understanding the basics of biochemical principles pertaining carbohydrates, amino acids, lipids and nucleic acids. These disciplines of science also give insights into the mechanisms of growth, development, metabolism, enzyme activity and operon. Biochemical laboratory principles and practical will be conducted in order to understand the role of biological molecules in cellular metabolism.	3	2/2
2	SY12603	Microbiology	This course is designed to provide basic knowledge in the study of microbiology and practical experience of basic techniques in microbiology. Microbial techniques are important in biotechnology fields because microorganisms are the basic model in understanding higher organism. They are the key to the biological revolution and model for genetic manipulation. Microbiology is also considered important in biotechnology fields because microorganisms are important in their effect on the health and well-being of all living creatures, including humans, and they are the key to the biological revolution in genetic engineering. In addition, they are vital to environmental science, food production, and the marine environment.	3	2/2
3	SY12803	Genetik Molecule	Molecular genetics is an important component of biotechnology. The course will facilitate the understanding of principle and processes involved in DNA replication, genome structure and organization in prokaryotes and eukaryotes, RNA transcription and Protein translation. Laboratory modules will engender the development of professional skills required in the modern biotechnology industry. Guided presentation modules ensure the effective reinforcement of knowledge and facilitate the communication of ideas, both of which are pre-requisites to professionalism.	3	2/2
4	SY22403	Prinsipal Plant Sel dan Tisu Culture	The basic concepts of plasticity and totipotency will be explained. The principles covering topics such as media composition, laboratory setup, aseptic technique and various techniques in plant tissue cultures will be discussed. Application of plant cell and tissue cultures technology in clonal propagation (micropropagation) and production of secondary metabolites will be explained.	3	2/2
5	SY23002	Genetic Engineering	This course is a major component in the discipline of biotechnology. It is designed to address the intricacies of gene manipulation in plants, animals, humans and microbes. This course will provide essential information in the area of modern biotechnology including the	3	2/2



			principles of gene manipulation, library construction, gene expression and its regulation. Students possessing knowledge in genetic engineering are highly sought after by the biotechnology industry.		
6	SY32203	Bioproses Industri	This course aims to complement the knowledge and concepts presented in SY32103 (Biochemical Engineering). In this course, the student is introduced to the more important topics about the fermentation process and apparatus design. It focuses on the downstream processing aspects of biotechnology and will allow students to be aware of how products and processes are commercialized. The central theme of this course is to provide students with the knowledge and understanding of the technology, processes, regulatory requirements and commercial issues involved in the production and commercialization of biotechnology products. Topics to be discussed include microbial growth techniques, isolation, presentation, media characteristics, sterilization, large-scale cell culture, fermentation, downstream processing of products including separation and purification technology, process design, standard operating procedures, compliance and regulatory requirements and the commercialization considerations in the design of a downstream process are extensively taught. The course also will allow the students to understand the relationship between other units of operations and the fermentation process. Applications of fermentation technology were covered at the end of the syllabus.	3	2/2

**UH6545002 - INDUSTRIAL CHEMISTRY**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	SK22602	Catalyst And Catalysis	This course covers introduction to the catalyst and its classification, catalyst preparation, characterization techniques, catalytic reaction and catalyst deactivation. The application of catalysts in the petrochemical industry, fine chemical and organic synthesis will be highlighted. Current application in energy-conversion technologies, greenhouse gas pollution control and water treatment also will be discussed.	2	2/2
2	SK23402	Residue and pesticide analysis	This course discusses the types of pesticides and their toxicity, mode of action of pesticides, movement and changes of pesticide residues in the environment and their effects on life especially humans. Sample preparation will be discussed in detail where new techniques will be incorporated. Pesticide residue analysis methods will be discussed using modern equipment such as GC/MS, GC/FID/ECD/NPD, HPLC etc.	2	2/2
3	SK34803	Nanotechnology	This course focuses on the definition, history, scope, impact and challenges in the field of	3	3/2

			nanotechnology that is being rapidly explored and developed. Discussions will cover various nanotechnology production techniques and studies on basic nanomaterials, nano-structures. Processes used in nano-construction include nano-tubes, nano-rods, colloids, patches, joints, wires and films. Comparisons and differences of "top down" and "bottom up" techniques will be discussed. Characterization techniques will be discussed in detail with emphasis on the fields of spectroscopy, radiation scattering, scanning electron microscopes, electron emitting microscopes and X-rays.		
4	SK33203	Natural Products Chemistry and Drug Discoveries	This course discusses the isolation of compounds from natural sources, their chemical and spectroscopic properties as well as their biogenesis and biosynthesis. The process of drug discovery from natural products that is closely related to the pharmaceutical industry is also emphasized. It includes fatty and oleochemical compounds, carbohydrates, chitin, amino acids and proteins, terpenoids and steroids, aromatic compounds, flavonoids and alkaloids. Drug findings from various sources will also be discussed.	3	3/2
5	SK34403	Biofuel Technology	Basic concepts in understanding biofuel / bioenergy systems; renewable raw materials, their production, availability and properties for biofuel / bioenergy production; types of fuels and energy derived from biomass; the thermochemical conversion of biomass into heat, power and fuel; biochemical conversion of biomass into fuel; environmental aspects of biofuel production; economics and biofuel life cycle analysis; adding value to biofuel waste; basic techno-economic analysis of biofuel production.	3	3/2
6	SK34003	Advanced Inorganic Materials	This course focuses on understanding the concept of Cradle to Grave and sustainability in the procurement, manufacturing and use of advanced materials in industrial processes and products. Emphasis is given to Material Resources, Productivity and Environmental costs for selected high value commercial products.	3	3/2

**UH6461001 - MATHEMATICS WITH ECONOMICS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	ST00802	Data Analysis with Statistical Package	A clear understanding of the concepts and practical of statistical programming package will help students to become more familiar with the nature of analyzing data in statistics.	2	1/2
2	SM14203	Mathematics II	This course contains topics such as vectors in 2D and 3D spaces, sequences and series, infinite series, power series, polar coordinate system and coordinate geometry.	3	1/2

3	SM24203	Linear Algebra	A clear understanding of the concepts of linear algebra will allow students to become more familiar with the nature of definition and proof in mathematics. A first course in linear algebra also serves as an introduction to the development of logical structure, deductive reasoning, and mathematics as a language.	3	1/2
4	SJ14403	Macroeconomics	To give a basic understanding on the system of overall economy. Macroeconomics is the study of the economy as a whole. This course is a further study from microeconomics course, of which the students studied on the economic behavior of individual consumers, firms, and industries. In this macroeconomics course, the students will study in a broader context of the economy such as the characteristics of aggregate economic variables, and how various fiscal, monetary policies and international trade policies affect the economy.	3	1/2
5	SJ24402	Financial Management	This course is an introduction course in the field of finance. It covers the main idea in finance that starts with a general background, conceptual framework and techniques to assist in managing financial decision. The main focuses are towards fundamental principal, exercises and financial management procedures.	2	2/2

**UUH6461002 - MATHEMATICS COMPUTER GRAPHICS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	SV10203	Aljabar Linear Berangka	In this course, the students will learn the basic concepts on vectors, matrices, continues with systems of equations with some method in order to solve the matrices of the systems. Finally, the discussion leads to the idea of adequacy of solutions and the eigenvalues and eigenvectors.	3	1/2
2	SV10403	Pengaturcaraan Komputer	This course provides students with a basic understanding of programming development practices starting from designing algorithm based on the fundamental concept of programming logic. Concepts covered will include the application of algorithms and logic to the design and development of procedural programs to address the problem-solving procedure required in computer programming field. This course will cover procedural programming concepts including data types, controls structures, iterations, functional decomposition, arrays and input validation.	3	1/2
3	SV10603	Matematik Diskret	The purpose of this course is to teach students how to think mathematically by learning a particular set of mathematical facts and how to apply them. To achieve these goals, some important fields are covered such as logic and proofs, basic structures, algorithms, number theory, counting, discrete probability, relation, graph theory and Boolean algebra.	3	1/2

**UH6422001 - ENVIRONMENTAL SCIENCE**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1.	SS11203	Environmental Ecology & Microbiology	This course will discuss in detail aspects of ecology and environmental microbiology with strong emphasis on aspects related to the environment. Topic such as aquatic ecology (e.g. river ecology; marine ecology), microbial ecology; soil and water microbiology; role of environmentally-related microorganisms (ERM) in the ecosystem and in pollution control/treatment will be covered. Fieldtrips and laboratory practicals will be carried out to enhance student's understanding on these topics.	3	1/2
2.	SS21203	Water Quality Analysis	This course discusses aspects of theory and practical pertaining to methods of water analysis. The water analysis covers physical, chemical and biological parameters, and emphases are made on the sampling method, sample treatment and preservation, techniques and analytical equipment. The aspects of data analysis, quality control and data interpretation are discussed. Students will be doing a mini project towards the end of the semester as training in the application of the knowledge gained earlier.	3	2/2

**UH6624001 - AQUACULTURE**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	SQ11203	Water quality management	This course provides an understanding of water quality that helps make aquaculture more environment-friendly and productive. Factors that affect water quality are explained. Water management and disposal methods are given emphasis. Topics of discussion include effects of pollution on aquaculture – problems associated with survival, growth and reproduction of cultured animals and public health problems.	3	1/2
2	SQ21203	Broodstock management and seed production	The aims of the course are to provide the essential principles of broodstock management and seed production of various important fish species and other species in aquaculture. This subject will encompass aspects from sourcing broodstock to egg collection, larval rearing to transportation of the seed to grow-out farms.	3	2/2
3	SQ21603	Immunology of aquaculture animals	This course will provide students to develop knowledge among students about the fish's immune system, its interaction with fish pathogens and responses to stimulation and vaccines. This knowledge is developed through lectures, individual or group work, written assignment submissions and through laboratory courses. Course provides an overview of the immune system in fish with	3	2/2

			emphasis on aquaculture species. The student will learn about the different organs, cells and molecules and how these work and collaborate, and how cells and functions are regulated and stimulated. The students are especially to develop knowledge about vaccines and immune stimulants for aquatic organisms with emphasis on the immune prophylaxis for aquaculture species.		
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**UH6443003 - MARINE SCIENCE**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1.	SL23603	Meteorology and Climate Change	Meteorology is the study of the atmosphere's motion and other phenomena to aid in forecasting weather and explaining the processes involved. It presents information about the science of the atmosphere and its effects on the surface of the Earth and on life in general. The course outlines include the history, structure and dynamics of the atmosphere including fronts and frontal weather; observational methods; storms; temporal changes in climate. By the end of this course, students should have a good knowledge about weather and climate that will broaden their scope of knowledge in the geosciences. An accurate appreciation of weather signs and prognostics, the ability to read and understand meteorological instruments and the understanding of weather reports and charts are necessary knowledge in marine science and fisheries activities.	3	2/2
2.	SL24003	Coral Reef Ecology	This course will discuss aspects related to the ecology of coral reefs. Emphasis is placed on coral community structure, classification and distribution worldwide, and more specifically in Malaysia. Factors affecting and threatening the ecology of coral reefs will also be discussed. Students will also be exposed to the importance of conservation as well as aspects of management and rehabilitation of coral reefs.	3	2/2
3.	SL32103	Marine organic Chemistry	This course will cover topics in marine organic chemistry encompassing the various chemical states, processes and changes that occur in seawater and sediment. Carbon, oxygen, nitrogen, sulfur and phosphorus cycles will be correlated with natural processes in the marine ecosystem. Besides, production, degradation and diagenesis of organic matter will be explained. Other aspects such as chemistry of sediments, origin of petroleum and chemistry of marine natural products will also be discussed.	3	3/2

## LIST OF COURSES OFFERED FOR EXCHANGE STUDENTS PROGRAMME (INBOUND MOBILITY)

### FACULTY OF SOCIAL SCIENCE AND HUMANITIES

UH6321001 - COMMUNICATION					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	AK10303	MEDIA, CULTURE & SOCIETY	This course discusses the structure and content of the media as well as what impacts it has the individuals, organisations, society and culture. It also examines the social, economic and political aspects of the media which impinge on its processes, structures and contents. Students will also be introduced to the mass media and media practices within and outside Malaysia including their roles and modus operandi. Students are encouraged, through tutorials and presentations, to discuss media freedom and social responsibilities of the journalists and the media they are affiliated to.	3	1/2
2	AK30803	COMPARATIVE JOURNALISM	This course is the sociology of news and journalism for majoring students. Due to the complex and multi-disciplinary nature of this course, this course is designed to expose students to various journalism models and make comparison in terms of practice and principles. Students are also exposed to the Western journalism practice due to the Libertarian press system in comparison to Asian journalistic practice based on the Asian development media system.	3	1/2
3	AK20203	COMMUNICATION LAW & ETHICS	This course's aim is to introduce communication laws and ethics to the student. This includes analyses of the communication legal (including policy) and ethical issues with respect to the media industry in the Malaysian context. The course scope cover introduction to the legal system in Malaysia, laws that regulate the media (both traditional and new media specifically cyber laws), and journalism ethics in Malaysia. Since there is decision-making with public interest nowadays seen takes place outside of formal legal structures, the course includes within its purview: principles that should or do underlie laws and regulations, awareness of existing and new laws and regulations, and the debates over press freedom practices through which policy is implemented.	3	1/2

UH6347001 - INDUSTRIAL RELATIONS					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	AH32003	INNOVATIONS & WORKING ENVIRONMENT	This course focuses on the integration among creativity, innovation and organizational change. Nowadays relevant issues related to workers and innovation development is vital. The organizational implications of these developments affects working environment and workers affairs alike. This course also covers innovative application in various domains, with respect to industrial relations.	3	2/2

**UH6312001 - SOCIOLOGY & SOCIAL ANTHROPOLOGY**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	AA10603	RELIGION AND SOCIETY	This course introduces students to the role of religion in society. Theories on the origin of religion by Tylor, Durkheim and Malinowski, and theories on the function of religion by Radcliffe-Brown, Kluckhorn and Geertz are discussed. In order to also understand the role of religion in society, aspects of religion as a group phenomenon, its relation to conflict and social organization, political life, economics, class systems, and also to the position and status of women, as well as change are discussed. In the context of culture, religion as systems of meanings, rituals, myths, shamanism and worship are debated.	3	1/2
2	AA30803	HUMAN ECOLOGY	This course introduces students to another major sub-discipline of Anthropology which specifically focuses on the interaction between humans and their environment. There are two main areas of study in Human Ecology: Human Biological Ecology which focuses on human biological adaptations to the environment, and Cultural Ecology where cultural adaptations are the main discussion. This course will emphasize Cultural Ecology.	3	1/2

**UH6313001 - INTERNATIONAL RELATIONS**

NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	AS10203	INTERNATIONAL POLITICAL ECONOMY	This course explains the role of the political economy in influencing the industrial relations climate in a country. The course will analyze regulations and national policies as well as the impact of the growth of multinational corporations and foreign direct investment to changes in work organization and industrial relations system of the country.	3	1/2
2	AS21203	INTERNATIONAL POLITICS OF AUSTRALASIA	This course discusses the imperative issues pertaining to the affairs of Australasian region. Specific interest is given to Australia, New Zealand, Papua New Guinea and Fiji from which historical, political and economic issues are discussed. This course shall also explore into the important elements of international system that shape the contemporary Australasian region.	3	1/2

UH6443001 - GEOGRAPHY					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	AG21203	ENVIRONMENTAL ECOSYSTEM MANAGEMENT	This course is design to introduce the students with basic ecological and ecosystem concepts. This includes the basic concept in environmental research with focusing the interaction between ecosystems. Furthermore, the course also focuses on mechanism in developing best practice in ecosystem management. Lastly, at the end of the course the student will be able to understand the importance of integrated ecosystem management.	3	1/2

UH6225001 – HISTORY*					
NO.	COURSE CODE	COURSE NAME	COURSE DESCRIPTION	CREDIT HOUR	YEAR/ SEMESTER
1	AJ21803	SOCIAL HISTORY OF MALAYA (1850-1963)	Kursus ini mengkaji aspek sosial dalam masyarakat Tanah Melayu dari Tahun 1850 hingga 1963. Ia membincangkan aspek tradisional masyarakat tempatan dan kaitannya dengan perubahan sosial pada abad ke-19 dan 20 terutama sekali kesan terhadap nilai tradisi dan Islam. Di antara aspek penting ialah kemunculan masyarakat majmuk, pendidikan, infrastruktur, perbandaran, sosio-ekonomi masyarakat pada zaman kemelesetan 1930-an, pendudukan Jepun dan darurat. Turut diteliti ialah aspek sosio-politik hubungan kaum dalam isu kemerdekaan.	3	1/2
	AJ21203	HISTORY OF MALAYSIA (1900-1957)	Kursus ini bertujuan untuk mendedahkan kepada para pelajar tentang perkembangan sosioekonomi Tanah Melayu sejak abad ke-19 hingga pra kemerdekaan. Fokus perbincangan meliputi perlumbaan kuasa-kuasa besar di Alam Melayu dan pengaruh mereka terhadap perubahan sosioekonomi Tanah Melayu khususnya, polisi-polisi yang telah diperkenalkan oleh kerajaan British terhadap perkembangan sosioekonomi di negeri-negeri Melayu sehingga tahun 1940an.		
	AJ31403	MALAY HISTORIOGRAPHY	Kursus ini mengkaji Pensejarahan Melayu untuk melihat bentuk dan penulisan sejarah Malaysia sejak zaman Empayar Melayu Melaka sehingga tahun 1960-an. Perbincangan berdasarkan kepada penganalisan dan perbandingan teks-teks Melayu lama seperti Sejarah Melayu, hikayat Raja-Raja Pasai, Tuhafat-al Nafis, Hikayat Achec dal lain-lain.		

\*in Malay Language