MT838/COMP S838  Enterprise Systems and Information Security Management

Course Coordinator: Dr TS Li (Email: tsli@ouhk.edu.hk)

This 10-credit optional course is one of eight courses in the MSCIT programme. The aim of the course is to teach students in two main areas of computing: OO Software development and information protection.

The contents of the course include:

**OO software development**
- Domain modeling
- Requirements
- Analysis
- specifying the software
- Design
- Design patterns
- Implementation in Java
- Testing
- Component-based architectures

**Information Security Management**
- Protection of information assets
- Strategic and operational aspects of information security
- IT governance
- Risk analysis and management
- Planning the implementation of an information security management system

There are four tutor-marked assignments (TMAs) spread throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct about nine tutorials and one revision session before the examination. Surgeries will also be held on one evening every two to three weeks when one tutor at a time will be on duty. It is a requirement that tutors are available to attend these tutorials on either Sunday or Saturday afternoon. In addition, they need to allocate a number of hours a week to give advice and help to their own group of students on the problems about the course. The questions can come in through regular phone calls, email messages, or the course OLE.
Usually one or two weeks before the cut-off dates of TMAs an increase in the number of queries or questions can be expected.

Applicants must have an advanced degree in Computer Science or a related subject such as Information Technology, Computing, Software Engineering, Information Engineering, etc. Experience in teaching or distance teaching would be an advantage but is not a requirement. Preference will be given to those who have teaching or working experience in software development, information security.

**POSTGRADUATE CERTIFICATE IN MULTIMEDIA AND INTERNET TECHNOLOGY**

**MT834 / COMP S834 Web Server Technology (10 credits; 2 semesters)**

Course Coordinator: Dr TS Li (Email: tsl@ouhk.edu.hk)

This 10-credit optional course is one of eight courses in the MSCIT programme. This course teaches students the underlying principles and technologies of the Web and its future directions.

MT834 Web Server Technology aims to provide students with a sound foundation of knowledge in World Wide Web technologies. It also aims to enable students to choose and evaluate the methods and options available for designing Web applications and services, to setup and maintain Web services, and to write computer programs for use in Web services.

There are at least the following ten major modules:

- Components of the Internet
- Structure of the Web Server
- Scripts and Forms
- Web robots, indices, and search engines
- Databases and State Management Mechanisms
- Web Service Performance
- Web Caching and Document Distribution
- Evolution of HTML and Interactive Web Services
- Security and the Web
- E-commerce and Cryptography

You will need to have access to a PC with Linux, a printer, and the Internet.

There are four tutor-marked assignments (TMAs) spread throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct about nine tutorials and one revision session before the examination. Surgeries will also be held on one evening every two to three weeks when one tutor at a time will be on duty. It is a requirement that tutors are available to attend these tutorials on either Sunday
or Saturday afternoon. In addition, they need to allocate a number of hours a week to give advice and help to their own group of students on the problems about the course. The questions can come in through regular phone calls, email messages, or the course OLE.

Usually one or two weeks before the cut-off dates of TMAs an increase in the number of queries or questions can be expected.

Applicants must have an advanced degree in Computer Science or a related subject such as Information Technology, Computing, Software Engineering, Information Engineering, etc. Experience in teaching or distance teaching would be an advantage but is not a requirement. Preference will be given to those who have teaching or working experience in web sites, streaming and encryption technologies.

**COMPUTING AND MATHEMATICS PROGRAMMES**

**Computing**

M359/COMP S359  
Relational Databases: Theory and Practice  (10 credits; 2 semesters)

**Course Coordinator: Dr Kelvin Lee (Tel: 2768 6815)**

This is an advanced computing course concerned with an application of computers which has an increasing influence on modern society.

The aim of the course is to explain the concepts underlying all relational databases as well as practical experience in applying the concepts in different situations.

The course is concerned with the planning, design, operation or use of relational databases.

There are five blocks. Each block is bound as one text which includes several parts, each describing an individual topic.

Block 1  
Information Systems, introduces the context of databases as part of an information system.

Block 2  
Relational Theory, presents a theory of relations from a practical perspective and how they can be represented by modelling.

Block 3  
Using SQL, is concerned with relational database management systems and in particular the use of SQL.
Block 4  Development of Database Systems, describes the steps involved in the development of database system.

Block 5  Databases Issues, covers a number of database topics.

There are lots of examples and activities, and software and its documentation are provided on a CD-ROM.

You will need to access to an PC compatible computer and a printer.

There are four tutor-marked assignments (TMAs) spread throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct nine tutorials and some surgeries throughout the course. It is a requirement that tutors are available to attend these tutorials and surgeries (on Weekday evening, Saturday afternoon or Sunday). In addition, they need to allocate a number of hours a week to give advice and help to their own group of students on the problems about the course which are raised by phone-in queries or through email/OLE discussion forums.

Usually one or two weeks before the cut-off dates of TMAs an increase in the number of telephone queries or questions can be expected.

Applicants must have an honours degree, preferably higher degree in Computer Science, Computing Studies, or equivalent. Teaching experience would be an advantage but it is not a requirement. (This course requires mandatory Internet access)

MT258/COMP S258  Computer Programming and Problem Solving  (10 credits; 2 semesters)

Course Coordinator: Dr Andrew K Lui (Email: alui@ouhk.edu.hk)

This is a compulsory course for students in a range of computing related degree programmes.

The course aims to provide students with fundamental skills and knowledge in programming and application development. It covers the following topics.

- Introduction to C programming
- Basic elements of programming, including memory, input/output, selection, repetition, etc
- Basic data types and structures
- Problem solving and intermediate data structures
- Algorithms and efficiency analysis

There are four tutor-marked assignments (TMAs) in the course. Tutors will grade and comment extensively on the TMAs.

Tutors are expected to conduct tutorials with his or her group of students. The tutorials will be held on a Saturday afternoon or Sunday. Surgeries will occur on about one evening every two weeks, and the duties will be shared among tutors. Tutors are also expected to allocate six hours per week to answer questions through email, online discussion forums, and telephone. The frequency of questions usually increases one or two weeks before the cut-off date of each TMA.

Tutors will need access to an IBM PC compatible computer, a printer, the Internet and Microsoft Word.
Applicants are expected to have an honours degree in computer science or equivalent, preferably with tertiary teaching experience and industry experience in C programming.


Course Coordinator: Dr Vanessa S. C. Ng (Tel: 2768 6814)

Content:
The aims of the course are to enable students to describe hardware and software architectures of computer systems; compare and contrast various designs and implementation approaches to computer systems; participate in specification, design and evaluation of computer systems; explain the architectures and basic techniques of loosely coupled distributed computer systems; describe the operation, maintenance and administration aspects of distributed systems. The topics covered are:

1. Overview of software and hardware of a computer system;
2. Computer system organization;
3. CPU architectures;
4. Assembly language programming;
5. Operating systems and process concepts;
6. Memory management, input/output, and file systems;
7. Case studies of operating systems;

TMAs: There are four tutor-marked assignments (TMAs) spread throughout the course. Tutors will be required to grade and comment extensively on TMAs.

Tutorials:
Each tutor is expected to conduct about twelve tutorials and one revision session before the examination. It is a requirement that tutors are available to attend these tutorials on either Sunday or Saturday mornings or afternoons. Surgeries will also be held in one weekday evening per fortnight when two tutors at a time will be on duty. Tutors are also expected to answer questions through email, discussion forums, and telephone. Usually one or two weeks before the cut-off dates of assignments there will be an increase in the number of phone or email questions. You will need to access to an IBM PC, a modem, and a printer. The University will provide an email account and free dial up access to the University network.

Qualifications required:
Applicants must possess an honours degree in computer science or equivalent, preferably with tertiary teaching experience or industry experience in relevant areas.

**MT263/COMP S263  Discrete Structures  (10 credits; 2 semesters)**

Course Coordinator: Dr Kelvin Lee (Tel: 2768 6815)

MT263 is primarily designed for students who intend to specialize in computing. It is an introductory course covering essential formal and theoretical concepts needed for further study of computing. The course covers fundamentals of computer science such as specification and abstraction in code, data structures, data types and classes. It then moves on to efficiency and proof of correctness of programs, so providing a basis for formal methods of software development. The course includes an introduction to formal logic. Mathematical ideas (such as sets and functions) are introduced where they help to clarify computing concepts.

The aims of the course are
- Provide students with the knowledge of code, data types, data structures and classes
- Enable students to write codes in classes
- Develop students’ knowledge and understanding in important data structures
- Introduce formal logic to write specifications and prove program correctness
- Analyse the efficiency of algorithms

The content include
- Data: Form and Function, Introduction to code, Data Types, and Introduction to Classes
- Important data structures and their associated classes: Logo-like graphics class, sequence-based collection classes, set, and binary trees
- Introduction to formal logic and aspects of databases
Recursion. Analysis of algorithms and proof of correctness.

A total of four tutor-marked assignments (TMAs) are given throughout the course. Tutors will be required to mark and comment extensively on TMAs. Each tutor is expected to conduct about ten tutorials for his/her group as well as some surgery sessions for answering questions from students. It is a requirement that tutors are available to attend these tutorials on either Saturday afternoon or Sunday. In addition, they need to allocate a number of hours a week to give advice and help to their own group of students on the problems about the course which are raised by email, discussion forums, or phone-in queries. Usually the number of queries and questions are expected to increase as the cut-off dates of TMAs approach.

It is expected that a tutor can have access to a x86 computer with MS Windows 98/XP and Word. A modem or broadband access is also needed but the dial-up access to the Internet will be provided by OUHK. Answering questions from students through other electronic means such as discussion group are also required.

Applicants must possess an honours degree in Computer Science or a related discipline, or have passed Part I and Part II examinations of the British Computer Society or equivalent. Tertiary teaching experience in discrete structures will be an advantage, but is not a requirement.

MT311/COMP S311 Java Application Development and Programming Languages (10 credits; 2 semesters)

Course Coordinator: Dr T.S. Li (Email: tsl@ouhk.edu.hk)

MT311 Java Application Development and Programming Languages is a higher level course for the B.Sc. & B.Sc. (Hons) in Computing and Networking.

The overall aims of this course are to provide students with the knowledge about the principles and concepts of different programming languages and advanced features in Java. In the Java module, it covers topics like multithreading, networking, web programming and XML. In the second module, it covers topics like programming

There are five tutor-marked assignments (TMAs) spread throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct about nine tutorials and one revision session before the examination. Surgeries will also be held on one evening per fortnight when one or two tutors at a time will be on duty. It is a requirement that tutors are available to attend these tutorials on either Saturday afternoon or Sunday. In addition, they need to allocate 4 to 6 hours a week to give advice and help to their own group of students through phone-in queries and online discussion.

Applicants must possess an honours degree, preferably higher degree in Computer Science or equivalent. Teaching experience would be an advantage but it is not a requirement. Preference will be given to those with experience in using or teaching Java.

MT356/CMP S356 Software Engineering and Project Management (10 credits; 2 semesters)

Course Coordinator: Mr. Oliver Au (Email: oau@ouhk.edu.hk)

MT356 Software Engineering and Project Management approaches software development as an engineering discipline. In particular, an object-oriented approach using UML is adopted. It attempts to prepare the students for the complexities of real-world development.

This course is a full-year, 10-credit higher-level course. It is compulsory course for B.Sc. & B.Sc.(Hons) in Computing and Networking, Bachelor of Computing (BCOMP), and Bachelor of Computing with Honours in Internet Technology (BCOMPHT).

There are four tutor-marked assignments (TMAs) throughout the course. Tutors will be required to grade and comment extensively on TMAs. A tutor is expected to conduct a 2-hour tutorial once a month. The tutorials will be held on Saturday afternoon or Sunday.

Throughout the course, there will be a total of sixteen surgeries to be held on weekday evenings. A tutor will be assigned to take charge of three to four surgeries. In a 2-hour surgery, the tutor will spend much of the time answering questions relating to the TMAs in a classroom setting. In addition, a tutor is expected to allocate four hours a week to answer students' questions through phone calls, email messages, or online discussion forum.
Applicants must possess an honours degree, preferably higher degree in Computer Science or equivalent. Teaching experience would be an advantage but it is not a requirement. Preference will be given to those with experience in software development.

**MT368/COMP S368  Networks and Distributed Systems  (10 credits; 2 semesters)**

Course Coordinator: Mr. Oliver Au (Email: oau@ouhk.edu.hk)

This course aims to provide students the knowledge of computer networks and the principles and practice underlying the design of distributed systems. This 10-credit higher level course will be delivered in the distance education mode via printed materials and the Internet.

Topics include:
- Networking and inter-networking, TCP/IP
- Threads and processes in distributed systems
- Process communications
- Software architectures for distributed systems
- Transactions
- Java technologies for distributed computing
- Web Services
- Heterogeneous distributed systems

There are four tutor-marked assignments (TMAs) throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct about 10 tutorials. Surgeries will also be held on one evening every two to three weeks. Depending on the size of the class, one or two tutors will be responsible to facilitate a surgery session. The tutorials will be held on Saturday afternoon or Sunday while surgeries will be held on a week day’s evening.

Online support of the course is available through the Online Learning Environment (OLE). You should participate actively in the discussion over there. You have to allocate six hours per week to answer queries from students either by phone or in the OLE. Applicants must have a good honour degree in Computer Science or related subject such as Information Technology, Computer Engineering, Information Engineering, etc. Experience in teaching would be an advantage but is not a requirement.

**MT411/COMP S411  Advanced Topics in Computing : Digital Multimedia and Java Mobile Games  (10 credits; 2 semesters)**

Course Coordinator: Dr Andrew K Lui (Email: alui@ouhk.edu.hk)

The course is divided into two blocks; each one examines one advanced topic. In the coming presentation, the topics of Advanced Networking and Digital Multimedia will be studied.

Block 1: Digital Multimedia
• Fundamentals of multimedia
• Digital audio, image, and video formats
• Compression and processing of audio, image and video
• Internet multimedia

Block 2: Java Games for mobile devices
• J2ME & Java architecture for mobile devices
• J2ME game design and development
• Build a J2ME game.

You will need access to an IBM PC compatible computer, a printer, the Internet, and Microsoft Word.

There are 4 tutor-marked assignments (TMAs) spread throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct about 10 tutorials. Surgeries will also be held on one evening per two to three weeks. One or two tutors will be on duty at a time. It is a requirement that tutors are available to attend these tutorials and surgeries. Tutors are also expected to answer questions through email, discussion forums, and telephone. The frequency of questions usually increases one or two weeks before the cut-off date of each TMA.

Applicants must have an honours degree (or higher) in Computer Science or a related field. Experience in teaching or industry experience in relevant areas would be an advantage. Java (J2SE and J2ME) will be used in the course for illustrations and in the assignments. Knowledge in the language is required.

U101/IT S101 Introduction to Information and Communications Technology
(10 credits; 2 semesters)

Course Coordinator: Dr Vanessa SC Ng (Tel: 2768 6814)

The course provides an historical perspective of the nature and impact of the continuously accelerating change occurring in all the technologies surrounding modern computing, and in particular the convergence of computing, microelectronics and communication technologies which has brought such an explosion in our capacity for data processing and transmission. It will show at the same time just how simple the underlying physical and logical mechanisms are, and yet how complex the process of transforming a real-life problem into a computer based solution can be. This 10-credit foundation level course will be delivered in the distance education mode via printed materials and the Internet.

Topics include:
• the nature of data, basic encoding systems, integration of multimedia data;
• transmission, storage and access of data;
• integration of multimedia data on a web page accomplished using HTML and XML
• the basic composition of a simple computing system;
• programs and programming using JavaScript;
• basic concepts of databases;
• presentation of information;
• confidentiality and security issues in information;
• the methods for encrypting data, cryptography standards;
You will need to have access to a PC with Windows 98 or above and Internet access. Dialup service will be provided by the university.

There are about four tutor-marked assignments (TMAs) throughout the course. Tutors will be required to grade and comment extensively on TMAs. Each tutor is expected to conduct about 10 tutorials. Surgeries will also be held on one evening every two to three weeks. Depending on the size of the class, one or two tutors will be responsible to facilitate a surgery session. The tutorials will be held on Saturday afternoon or Sunday while surgeries will be held on a week day’s evening.

Online support of the course is available through the Online Learning Environment (OLE). You should participate actively in the discussion over there. You have to allocate about six hours per week to answer queries from students either by phone or in the OLE. Applicants must have an honours degree in Computer Science or related subjects with programming experience in Javascript, HTML and XML. Experience in teaching computing related subjects would be an advantage.

**Mathematics**

**M121/MATH S121**  
A Foundation in Pure Mathematics (10 credits; 2 semesters)

*Course Coordinator: Dr Anita S. M. Wong (Tel: 2768 6810; Email: anwong@ouhk.edu.hk)*

This is one of the two mathematics foundation courses offered to learners who will begin their study through distance learning.

The course starts with a Preparatory Unit to introduce students the required Mathematical skills. The course aims to introduce a wide range of discrete mathematics and the basic concept of intermediate algebra. Students will also be introduced to an algebraic software package through a series of exercises and the different Internet communication channels through which they will be able to seek and obtain additional support throughout the course.

The course is divided into five blocks:

- **Block 1 and Block 2**: provide a basic introduction to the mathematics language that will be used in this course. Geometric views and algebraic representations will be used to start and to develop students’ mathematical ability on set theory, logic, Boolean algebras, relations and functions.

- **Block 3**: is on proofs and combinatorics. Different strategies in writing proofs such as mathematical induction, direct proofs, proofs by contradiction and by exhaustion are introduced. Next students explore ways to count things mathematically, to write mathematically, and to observe patterns in a more logical way. They learn to apply permutations, combinations and the Binomial expansion.

- **Block 4**: is on recurrence and iteration. Students will learn how to find solutions of recurrence relations and to find approximations to roots of functions.
- **Block 5**: is on algebraic structures. Students will learn how to construct array using Matrices. Complex will also be introduced in building up abstract concepts.

In addition to the 14 2-hour regular tutorials there will be weekly, face-to-face surgery presented by tutors. In addition; tutors will be expected to participate in the online discussion board as well as respond to emails from students. There will be five Tutor-marked assignments, and four multiple choice assignments.

Students will be required to buy a computer software package called Scientific Notebook. This will be used to allow students to experiment with the mathematics taught in the course. This will encourage them to learn by discovery as well as to enable them to tackle more realistic problems without the burden of extensive calculations/manipulations. Some units and assignments will include work with the software. Tutors will be provided with a copy of this package.

M121 is an Online Learning Environment (OLE) Course. Tutors must be able to Communicate and to support students’ learning through the OLE. Details about the OLE Components can be found from http://www.ouhk.edu.hk/ole.html.

Tutors must have at least an honours degree in mathematics or related discipline. Teaching experience in mathematics and experience in using computer for communications on the Internet would be an advantage.

**M214/MATH S214  Fundamentals of Group Theory and Geometry  (10 credits; 2 semesters)**

**Course Coordinator:** Mr. Calvin Tsui (Tel: 2768 6811)

The course is derived from M203, a middle level pure mathematics course from British Open University. It is a compulsory course for both BSc and BSc (Hons) in Mathematics. The course is also compulsory for secondary teachers who pursue an honours degree in Secondary Education with Mathematics as an area of specialization. It aims to provide students with fundamental knowledge on Group Theory and Geometry. It is recommended for students who are interested at higher levels of mathematical abstraction.

The course has a Preparatory block, Group Theory block and Geometry block. Learners are expected to study a unit within two weeks. The course covers the following topics:

- **Preparatory (3 units):** Mathematical Language, Symmetry, Groups and Subgroups
- **Group Theory (5 units):** Permutations, Cosets and Lagrange’s Theorem, Conjugacy, Isomorphisms and Homomorphisms, Group Actions
- **Geometry (5 units):** Affine Geometry, Inversive Geometry, Non-Euclidean Geometry, Projective Geometry: Lines, Projective Geometry: Conics

There are 7 audio-CDs and 13 television programs in this course.

Tutors are expected to provide support to these adult learners in building up relevant mathematical concepts through tutorials, assignments, telephone contact and communication through the Internet. Tutors must allocate four hours every week to answer students’ queries through the telephone and to answer messages in the OLE. As students have different mathematical backgrounds, tutors must be patient and sympathetic in helping adult learners.

There are 4 tutor-marked assignments spread throughout the course. Tutors are given a marking scheme on each assignment and they are expected to teach through assignment marking. Students may submit their assignments electronically so that tutors are expected to mark assignments electronically.

The course has nine 2-hour tutorials. All tutorials are held on either Saturday or Sunday afternoons. Tutors must prepare work to initiate discussions at these tutorials.

Tutors for this course must have a master degree in mathematics (or equivalent) with a substantial component in Pure Mathematics. Teaching experience at an undergraduate level in Pure Mathematics is a distinct advantage.
The course is derived from part of the M208, a middle level pure mathematics course from British Open University. It is a compulsory course for BSc/BSc(Hons) in Mathematical Studies, and optional course for BSc/BSc(Hons) in Statistics and Decision Science. This course is intended to provide conceptual understanding in the theory of mathematical analysis. This course also deals with the basic theory of analysis in real-valued functions in single variable. It provides students with a good foundation for higher level courses in the mathematical studies.

The course is made up of 6 study units: topics include series, continuity, limits, differentiation, integration and power series. The course covers the following topics:

- Series – convergent series, test for convergence and its proof, non-null test and alternative test, absolute convergence
- Continuity – continuity of functions, Local rule and Glue rule and Restriction rule, Intermediate Value Theorem, Extreme value theorem, inverse functions and inverse function rule
- Limits – rules for limits and one-sided limits, asymptotic behavior of functions, uniform continuity
- Differentiation – differentiable functions and test for differentiability, rules for differentiation and proofs, Roll’s theorem, Local Extremum theorem, Mean Value theorem, L’ Hôpital’s rule
- Integration – Riemann integral, Fundamental theorem of calculus, inequalities for integrals, Wallis’s formula, Integral test, Stirling’s formula for n!, Riemann’s criterion for integrability and proof
- Power series – Taylor’s polynomials and theorem, approximation by Taylor’s theorem, convergence of power series, radius of convergence, approximate derivative using power series

Students have been advised to complete both foundation mathematics courses M121 and M122 before they enrol on M216. They should be independent learners on studying course units. Tutors are expected to provide support to these adult learners in building up relevant mathematical concepts through tutorials, assignments, telephone contact and communications through the Internet.

The course contains 2 tutor-marked assignments, which will require about one hour to mark on average. Tutors are given a marking scheme on each assignment and they are expected to teach through assignment marking. Each tutor will be allocated 30 - 35 students.

About six 2-hour tutorials and 4 surgeries are held during weekends throughout the course. The tutor is required to prepare notes for students to use in the tutorials and to own a computer at home. In addition, tutors are required to allocate a minimum 8 hours per week for student contact through telephone, web learning environment or email. The frequency of questions usually increases one or two weeks before the cut-off date of each TMA.
M216 is an Online Learning Environment (OLE) course. Tutors must be able to communicate and to support students’ learning through the OLE. Details about the OLE components can be found from http://www.ouhk.edu.hk/ole.html.

Tutors for this course must have a higher degree in mathematics (or equivalent) with a substantial component in Pure Mathematics. Teaching experience at ’A’ level or above in Pure Mathematics is a distinct advantage.

M222/MATH S222 Mathematical Models with Applications (10 credits; 2 semesters)

Course Coordinator: Dr Anita S.M. Wong (Tel: 2768 6810; email:anwong@ouhk.edu.hk)

This is a second-level applied mathematics course featuring on mathematical modeling techniques and skills for students in mathematics, electronic engineering, science and technology programmes.

The course teaches the use of mathematics with algebraic software in solving real-life problems and the skill of mathematical modelling process.

The course consists of three main themes of study. One of these themes is about how to represent relevant aspects of the real world problems in the form of mathematical models. The second theme is about mathematical methods that are useful in working with such models. The third theme of the course is about the use of computer algebra package and software MathCAD to solve mathematical problems numerically.

This course includes 14 units. 10 of these units are based on mechanic mathematics which starts with Status and Newton's second laws of motion and their consequences for a particle or for a system of particles in one-, two- and three-dimension, continuing with vibrations of such a particle system. The vibrations of systems of particles involve the moments, circular motion, motion of rigid bodies and Planetary orbits. The other 4 units are devoted to the processes of mathematical modelling and practical skills in modelling real-life problems. Examples of mechanic and non-mechanics models are illustrated. The mathematical methods of this course require good concept of differentiation and calculus

Some activities will be carried out using computer algebraic software - MathCAD. The course software will be delivered on CD-ROMS as part of the course material. No programming skills are required

Students taking M222 have been advised to complete one of the mathematics foundation courses: M121 or M122 or have gained relevant mathematics knowledge from their previous study. They should be reasonable competent in studying as independent learners

There are 4 tutor-marked assignments spread throughout the course.

Each tutor is expected to meet with his/her group in 9 2-hour regular tutorials during weekends throughout the course. The tutor is required to prepare notes for students to use in the tutorials and to own a computer at home. Some regular surgeries will be held on weekend with tutors attending on a rota basis. In addition, tutors are required to allocate a minimum 8 hours per week for student contact through telephone, web learning environment or email.

For this course tutors should have an honours degree in mathematics, applied mathematics, engineering or equivalent. It is required that the tutor has practical experience in using mathematical or algebraic software (preferable MathCAD). Teaching experience would clearly be an advantage, although it is not a requirement.
M333/MATH S333  Advanced Mathematical Methods (5 credits; 1 semesters)

Course Coordinator: To be confirmed

M333 is a higher level applied mathematics course and teaches several advanced mathematical methods used to solve the ordinary and partial differential equations such as: Laplace’s equation, the wave equation and the diffusion equation, vector calculus and Fourier analysis.

The course is divided into 7 study units covering the following topics:

Unit 1 Properties of a fluid - Illustrate the basic equations and mathematical methods for computing the nature of fluid mechanics.

Unit 2 Ordinary differential equations - Extends the methods of ordinary differential equations on the boundary-value and eigenvalue problems and use the method of power-series for solving initial-value problems.

Unit 3 First-order partial differential equations - Teach the method of characteristics for solving first-order partial differential equations.

Unit 4 Vector field theory - Extends the line, surface and volume integrals through two important theorems: (1) Gauss’ theorem and (2) Stokes’ theorem, and apply the equation of mass continuity for a fluid in motion.

Unit 5 Second-order partial differential equations - Investigates analytically the solutions of second-order partial differential equations and classify the different between Elliptic; Hyperbolic and Parabolic.

Unit 6 Fourier series - Apply Fourier series together with separation of variables and introduce the Sturm-Liouville theory.

Unit 7 Laplace’s equation - Solve Laplace’s equation and apply it to physical models.

M333 is an Online Learning Environment (OLE) Course. Tutors must be able to communicate and to support students’ learning through the OLE. Details about the OLE Components can be found from http://www.ouhk.edu.hk/ole.html.

There are 2 tutor-marked assignments spread throughout the course.

Each tutor is expected to meet with his/her group in 6 2-hour regular tutorials during weekends throughout the course. The tutor is required to prepare teaching notes for students to use in the tutorials. Some regular surgeries will be held on weekend with tutors attending on a rota basis. In addition, tutors are required to allocate a minimum 8 hours per week for student contact through telephone, on-line learning environment or email.

Tutors for this course will be required to have a Master degree or above in applied mathematics, or a related subject. Given the level at which the course subjects are to be taught candidates should consider carefully whether they have the appropriate academic background in all of the subjects. Teaching experience would clearly be an advantage, although it is not a requirement.

M346/MATH S346  Linear Statistical Modelling (10 credits; 2 semesters)

Course Coordinator: Mr Calvin Tsui (Tel: 2768 6811)

M346 is a course imported from the British Open University and builds upon the middle-level courses M245: Probability and Statistics, M246: Elements of Statistics or M248: Analysing Data. The course is an option in the Applied Computing and Mathematics degree programmes.

M346 follows course M245/M246/M248 in its approach, using real problems and data to stimulate analyses and their interpretation. Theoretical background is not ignored, but the main emphasis is on method. After a general introductory chapter it will be reviewed the statistical methods and concepts that will be needed later. One chapter reviews general statistical background, another the basic linear regression model, extensions of which are the core of this course. A statistical software package – Genstat will be used for data analysis in these chapters. There is a chapter that gives a complete introduction to using Genstat. The later chapters introduce a wide variety of linear
statistical modelling tools: one-way analysis of variance, multiple regression, more general analysis of variance and designed experiments. All these are special cases of the normal linear model. Further chapters develop linear modelling in the more general framework of the generalized linear model: binary regression, the full generalized linear model, diagnostic checking and log-linear modelling. A closing chapter applies the methods students have learnt to the analysis of further data sets.

The course involves four tutor-marked assignments spread over the course. Each tutor will be expected to meet with his/her group of students around ten to twelve 2 or 3-hour tutorials held at either weekday evenings or weekends.

Tutors will be expected to communicate with students and handle the assignments through Internet and to make use of their own examples and case studies in tutorials and therefore practical experience in the use of the techniques in the course is required. As the course is a higher-level one tutors will be required to have at least an honours degree in mathematics with a statistics as a major element of the degree. Preference will be given to applicants with a Master degree or higher in statistics or related subject.

ENGINEERING SCIENCES PROGRAMMES

Electronics and Communications Technology
CT211/ELEC S211 Fundamentals of Communications Technology (10 credits; 2 semesters)

Course Coordinator: Dr H.K. Lau (Tel: 2768 6845; Email: hklau@ouhk.edu.hk)

This course is one of the compulsory courses in the BSc and BSc (Hons) Communications Technology programme and the BSc (Hons) Communications Technology with Management programme. It is also suitable for students who simply want to learn the fundamentals of communications technology.

The course is designed to use online activities as integral learning components, so a basic knowledge of operating computers in a Microsoft Windows environment is essential before commencing the course.

This course aims to:

• Teach students the basic principles and building blocks of communication systems;
• Provide the theoretical and technical background of major communication systems to permit further study in higher-level courses at the OUHK;
• Outline the development and evolution of different transmission media;
• Describe and apply communication theories underlying communication systems: for example, amplitude modulation, frequency modulation, coding and multiplexing techniques;
• Outline the structure, operation and technologies for specific communication systems: for example, fixed and mobile telephones, television broadcasting, and optical and satellite communication systems;
• Demonstrate the limitations or constraints in communications technology and how they can be overcome;
• Guide students to further sources of knowledge and information about communications technology and systems.

The course covers the following topics:

• Basic principles of communication systems and telecommunication services in Hong Kong
• Time-domain signal analysis
• Frequency-domain signal analysis
• Analogue modulation techniques
• Principles of digital communication systems
• Transmission media and channel impairment
• Radio frequency communication systems, antenna theory and microwave devices
• Fixed telephone, mobile telephone and satellite communications systems
• Television broadcasting and optical communication systems
• Computer networks and the Internet

There will be five tutor-marked assignments (TMAs), and one final examination. The assignment exercises are designed to test the students on practical work and analysis skills. Tutors will be required to mark and comment extensively on TMAs.

Each tutor is expected to conduct about 10 two-hour tutorials for his/her group as well as some surgery sessions for answering questions from learners. It is a requirement that tutors are available to attend these tutorials on Saturday and Sunday. In addition, they need to allocate a number of hours a week to give advice and help their own group of learners on the problems about the course which are raised by phone-in queries, e-mails or on-line discussion board. Usually the number of queries and questions are expected to increase as the cut-off dates of TMAs approach.

Applicants must possess an honours degree, preferably a higher degree, in Electronic Engineering, Information Engineering, Communications Engineering or equivalent. Teaching experience at tertiary level or relevant industrial experience would be an advantage.

**CT311/ELEC S311 Wireless Communications (10 credits; 2 semesters)**

Course Coordinator: Dr H.K. Lau (Tel: 2768 6845; Email: hklau@ouhk.edu.hk)

*CT311 Wireless Communications* is a one-year, 10-credit, higher-level course. The course is self-contained and assumes no specific knowledge of wireless communication concepts and techniques. However, learners are expected to have a basic knowledge of digital communications, therefore, they are highly recommended to complete *CT211 Fundamentals of Communications Technology* before taking this course. The overall aims of this course are to introduce learners to the basic principle and practices of wireless communications, including cellular concepts, radio communication channel models, radio link design, basic communication techniques used to achieve reliable wireless communications and practical wireless communication systems. *CT311 Wireless Communications* covers the following topics:

- Introduction to wireless communication system and services
- Design concepts for cellular systems
- Mobile radio propagation: large-scale models
- Mobile radio propagation: small-scale models
- Digital modulation and channel coding techniques for wireless communications
- Equalization and diversity techniques for wireless communications
- Wireless personal area networks and wireless local area networks
Fixed wireless wide area networks
- 1G and 2G mobile communications systems and standards
- 2.5G and 3G mobile communications systems and standards
- Evolving wireless communications technologies

There will be five tutor-marked assignments (TMAs), and one final examination. The assignment exercises are designed to test the learners on practical work and analysis skills. Tutors will be required to mark and comment extensively on TMAs.

Each tutor is expected to conduct about 10 two-hour tutorials for his/her group as well as some surgery sessions for answering questions from learners. It is a requirement that tutors are available to attend these tutorials on Saturday and Sunday. In addition, they need to allocate a number of hours a week to give advice and help their own group of learners on the problems about the course which are raised by phone-in queries, e-mails or on-line discussion board. Usually the number of queries and questions are expected to increase as the cut-off dates of TMAs approach.

Applicants must possess an honours degree, preferably a higher degree in Electronic Engineering, Information Engineering, Communications Engineering or equivalent. Tertiary level teaching experience or relevant industrial experience would be an advantage.

T225/ELEC S225 Analogue Circuits (10 credits; 2 semesters)

Course Coordinator: Dr Wilson Hon-Wai Chu (Tel: 2768 6817; email: wchu@ouhk.edu.hk)

This course is intended to give a basic understanding of electronic principles, circuits and systems and to develop the fundamental theory and practical skills required to carry out engineering analysis and design. It provides essential background knowledge for higher level courses in electronics and related disciplines. It is also suitable for students of other disciplines who require a good working knowledge of electronics. However, the treatment is not superficial, and a good mathematical and scientific background is necessary.

The central theme of the course is the analysis and design of analogue circuits. The course includes: AC circuit analysis, including step and frequency response; properties of amplifiers, feedback and operational amplifiers; transistors; design of an audio pre-amplifier and power amplifier; higher frequency aspects of analogue circuits and an introduction to radio transmission and reception.

Practical skills in electronics are developed in short laboratory sessions held in our own laboratories at Homantin and two one-day Sunday Long Lab held in our own laboratory.

This course uses a computer-aided design package to help with circuit design. Both students and tutors are required to have access to an IBM PC or compatible computer to run this CAD software.

Tutors will be required to grade and comment extensively on 5 written assignments submitted by the students. Tutors are required to attend regular two-hour tutorials, surgery sessions, as well as the laboratories.

Applicants are expected to have an honours degree in Electronics. Experience of teaching Electronics at tertiary level would be a distinct advantage, but is not essential.
T323/ELEC S323  Information Theory and Digital Communications  
(10 credits; 2 semesters)

Course Coordinator: Dr Wilson Hon-Wai Chu (Tel: 2768 6817; email: wchu@ouhk.edu.hk)

The course aims to provide students with an understanding of fundamental limits in information theory and basic knowledge of the major principles, systems and techniques used in digital communications. More importantly, the course aims to enable students to follow and interpret descriptions of systems which are new to them, and which have not been covered specifically in the course.

The course includes: overview of communication systems; introduction to digital signals and communication systems; reliability, traffic information; time and frequency domain models of digital signals; noise sources and characterisation, noise in circuits and systems, threshold detection and error rates; digital coding and modulation; modems; fundamentals of information theory source coding theorem and channel coding theorem; linear block codes, convolutional codes, scramblers, interleaving; equalization; multiplexing, multiple access techniques.

Tutors will be required to grade and comment extensively on 5 written assignments submitted by the students.

Tutors will be required to attend regular two-hour tutorials and surgery sessions.

Applicants are required to have an honours degree in Electronics, and preferably a higher degree in a suitable subject (e.g. Electronics, Communications or Information Technology). Experience of teaching Communications at a tertiary level would be a distinct advantage.

T333/ELEC S333  Computer and PC Design  (10 credits; 2 semesters)

Course Coordinator: Dr Kevin Hung (Tel: 2768 6865; Email: khung@ouhk.edu.hk)

Contents
The course covers the following topics:
- Computer system design and performance measurement
- Instruction set architecture, 80x86 and MIPS
- Pipelining and performance evaluation
- Memory hierarchy, virtual memory; memory system design and technology
- Chips, peripherals and buses
- BIOS, drivers, firmware and operating system
- Computer networking
- Case studies of various computer designs

Tutors will be required to mark 4 written assignments submitted by each student over a period of a year. Each tutor will take 10 tutorials and 10 surgeries each 2-hour long. Tutors will also be required to support the course discussion group on the Internet and to answer questions raised by students through email.

Applicants must possess at least a good honours degree in a computer-related discipline with two or more years of tertiary level teaching experience or experience in a relevant industry.

U234/IT S234  Web Site Design  (10 credits, 2 semesters)

Course Coordinator: Dr Steven Choy (Tel: 2768 6857; Email: sochoy@ouhk.edu.hk)

Web design is a challenging and dynamic field of endeavour. It’s challenging because it is multi-disciplinary in nature and encompasses skills such as process management, creative design, business know-how and technical architecture. It’s dynamic because there are so many variables involved in the process – browsers, servers, network access, authoring and multi-media standards, and website stakeholders.

With such a wide variety of topics to cover, this course aims to introduce the students to the primary concepts and techniques they need to know, and to provide them with a good starting point from which to venture deeper into their specific areas of interest. It also acquaints them with current and emerging trends in authoring, site design and Internet access that may influence Web development in the not-so-distant future.
The broad prerequisites for students are familiarity with accessing and using the Internet, basic Web page publishing and a basic knowledge of HTML. U234 then aims to equip students with the practical skills needed to design and manage Web sites for small-scale Web commerce.

Students will take on the role of Web site designer for a small business and will build upon the given case studies to produce a Web site that includes Web commerce features, using good design and professional practices. They will typically host their Web site in a standard `public_html` directory on a shared server with CGI access. They will also become familiar with developing trends in technology and their likely effects on Web design.

The course is divided into three phases and ten Units.

**Phase 1. Preparing for Web Design** presents the basic concepts for the course:
- **Unit 1: Web Design Basics and Process** introduces basic design guidelines used in building and evaluating Web sites, the common tools and technologies for constructing Web sites, and the Web site development process.
- **Unit 2: E-Commerce Concepts** describes the design and implementation issues that apply to Web commerce sites.
- **Unit 3: Analysis and Planning** is the first stage of the Web site development process. This step is where the goals and scope of the project are defined and agreed upon, and site-wide architectural decisions are made. The output of this step will feed into the succeeding steps in the process.

**Phase 2. Design and Production** focuses on the detailed design and production of the individual elements that make up a Web page and how they are all put together.
- **Unit 4: Page Layout** discusses the structuring and organization of content on a Web page and the use of storyboards and prototyping techniques in presenting the layout.
- **Unit 5: Text and Typography** looks at the design issues affecting the text content on a Web page. It introduces formatting techniques using both HTML and Style Sheets.
- **Unit 6: Graphics and Multimedia** deals with the production and appropriate use of graphics and multimedia elements.
- **Unit 7: Interactive Elements** describes the programming languages that operate on the client (i.e. browser) and the server and how they can be used to implement interactivity and applications on a Web site.

**Phase 3. Going Live** discusses the testing and on-going support and maintenance that must be performed after the site launch.
- **Unit 8: Testing and Deployment** discusses testing methods to ensure that the Web site performs according to the original project specifications. It describes the process of moving the site to a live production server.
- **Unit 9: Promotion and Maintenance** covers site promotion and operational issues to consider in managing an active business Web site effectively.
- **Unit 10: The Future of Web Design** takes a look at the emerging trends in Internet access and technology that can have a major influence on the field of Web design.

Tutorials:
It is expected that there will be about 12 hours of face-to-face tutorials spread over the course as well as a series of online classes. Tutors will be expected to provide online support through the course discussion board as well as through email.

Assessment:
There will be 4 TMAs, which are to be submitted and processed electronically.

Applicants are required to have an honours degree in a related area and to demonstrate extensive experience in Web site design incorporating the types of features taught in U234.

**Engineering Mechanics, Material and Design**

M364/DESN S364  Fundamentals of Interaction Design  (10 credits; 2 semesters)

Course Coordinator: Dr Tony Lee (Tel: 2768 6862; Email: clee@ouhk.edu.hk)

Content:
Chapter 1: An overview of interaction design
It provides a broad overview of interaction design, introducing the key issues and activities of the subject, for example, the terminology and fundamental concepts of the area; the main activities involved in interaction design; and the importance of user involvement in the design process.

Chapter 2: Requirements

It addresses a key activity in interaction design: that of establishing requirements for an interactive product. Some of this material may be familiar to you if you have studied any software development courses in the past, but we approach the subject with a different perspective: focusing on making the product usable for the intended population.

Chapter 3: Design

It covers the techniques and knowledge necessary to design an interactive product that is accessible and useful to the people who are expected to use it. This includes an understanding of interaction paradigms, metaphors, conceptual models, cognitive processes, and the use of design approaches for a variety of interactive.

Chapter 4: Evaluation

It presents the techniques and knowledge necessary to evaluate an interactive product. This includes an ethical framework for evaluating with users, techniques and tips for observing users, asking experts and users, and testing with users.

There will be four Tutor-Marked Assignments (TMAs).

There will be 10 tutorials and 9 surgeries, each two hours long. A tutorial and a surgery on weekend or in the weekday after office hours will be held almost once every month.

Applicants must possess at least a good Honours degree in Design or Product Analysis or Product Engineering or a related discipline. Experience in teaching relevant subject at tertiary level or experience in relevant industry would be an advantage.

S409/SCI S409 Safety and Reliability for Science and Technology (5 credits; 1 semesters)

Course Coordinator: Dr H.K. Lau (Tel: 2768 6845; Email: hklau@ouhk.edu.hk)

SCI S409 is a core course of the BSc / BSc (Honours) in Applied Science (Biology and Chemistry) and the BSc/BSc (Hons) in Product Design and Technology programmes. This course is also recommended to students whose major interest is in a degree programme in either Electronics, Communication Technology, Computing, and Engineering Mechanics, Materials and Design.

The overall aims of this course are to introduce to students the basic principles and practices of safety and reliability in the fields of science and technology.

This course aims to:

- Understand the safety practice and safety audit in science and technology disciplines.
- Provide students an introduction to reliability.
- Provide students with an appreciation of reliability prediction and testing of components and system.
- Help students to become accustomed to techniques for the assessment of plant reliability as well as hardware and software maintainability.
The course covers the following topics:

- Safety practices
- Safety audits
- Reliability analysis
- Life testing and collection of reliability data
- Maintainability

Each tutor is expected to conduct about 5 two-hour tutorials for his/her group as well as some surgery sessions for answering questions from learners. It is a requirement that tutors are available to attend these tutorials on Saturday and/or Sunday. In addition, they need to allocate a number of hours a week to give advice and help their own group of learners on the problems about the course which are raised by phone-in queries, e-mails or on-line discussion board. Usually the number of queries and questions are expected to increase as the cut-off dates of TMAs approach.

Applicants must possess an honours degree, preferably a higher degree in Quality Engineering, Manufacturing Engineering, Mechanical Engineering, Production Engineering, or equivalent. Teaching experience at tertiary level or relevant industrial experience would be an advantage.

**S271/PHYS S271  Discovering Physics (10 credits; 2 semesters)**

Course Coordinator: Dr Tony Lee  (Tel: 2768 6862; Email: cclee@ouhk.edu.hk)

S271 is an optional course for B.Sc.(EMMD), B.Sc.(PDT) and B.Sc.(Hons)(PDT) programmes and a compulsory course for B.Sc.(Hons)(EMMD), B.Sc.(Hons)(EMMD with management), B.Sc.(Hons)(Electronics) and B.Sc.(Hons)(Electronics with management) programmes.

This course extends the range and depth of treatment of the physics topics in S111/S121 (or S102/S122) and provides a broad grounding in physics. It has been designed for those students who require a basic knowledge of physics to underpin their study of subsequent courses in the degree programmes in Electronics, Engineering Mechanics, Materials and Design, and Product Design and Technology.

The course has the following aims:
1. To introduce learners to the fundamental ideas constituting the core of today's physics so that they may gain an understanding of the basic laws that govern the world, from the subatomic to the cosmic scale;
2. To stimulate learners to merge the knowledge they have learnt from the course to describe the physical picture of stellar evolution; and
3. To provide learners with an opportunity to engage in experimental activities related to the materials studied during the course and provide them with skills to manipulate experimental data and present analysis of data with critical comments and discussion.

This introduction to physics, assumes some mathematical skills such as graphs and simple algebra. Principles of classical physics – mechanics, kinetic theory and chaos, vibrations, waves and electromagnetism – are covered as well as descriptions of twentieth – century discoveries, in particular Einstein’s theory of special relativity and the development of quantum mechanics. The study units are:
Newtonian Mechanics (Block A):
- Motion in one dimension
- Motion in two and three dimensions
- Conservation of momentum and energy
- Rotational motion;
- Kinetic theory and chaos

Waves and Electromagnetism (Block B):
- Vibrations;
- Waves
- Charges, forces and fields
- Electric potential and electric current
- Magnetic fields and the Lorentz force law
- Electric and magnetic fields that vary with time

Revolutions of Modern Physics (Block C):
- Special relativity
- The beginnings of modern atomic physics
- The quantum mechanical theory of matter
- Quantum mechanics in atoms
- Applications of quantum mechanics

Tutors will have to mark and extensively comment on 5 tutor-marked assignments (TMAs). Though marking guides will be provided, tutors will need to familiarize themselves fully with all of the components of the course in order to provide proper guidance to students through their written comments.

Tutors will be required to conduct a series of 9 two-hour tutorials at intervals of about 4-5 weeks. In addition, tutors will also be expected to attend a number of laboratory classes throughout the course. These classes are of two types: (1) 'Short lab' sessions involving brief and simple experiments, (2) 'Long lab' sessions will normally held on Sundays and run from 9:00 a.m. to 6:00 p.m. either at the OUHK laboratory or at the rental laboratory outside the campus. Tutors will also be expected to provide support and help to students through 11 surgery sessions.

Applicants are expected to have an honours degree in Physics and preferably with some experience in teaching physics at tertiary level.

**T235/MECH S235  Engineering Mechanics : Solids  (10 credits; 2 semesters)**

**Course Coordinator : To be confirmed**

T235 is a course within the degree programmes in Product Design and Technology and Engineering Mechanics, Materials and Design. T235 is a recommended prerequisite for T395 Mechatronics.

This course has the following aims:

- to introduce the fundamentals of solid mechanics, including statistics and dynamics. This basic understanding is an important element in the training of engineers with a wide range of interests and specialisms.

- to provide the basic analytical tools which design engineers need to create and assess the design of mechanical components and systems.

The course is divided into several principal areas of study: kinematics, statics, dynamics and structures.

Kinematics is the representation and analysis of motion itself, i.e. the position, speed and acceleration of mechanisms and free bodies. Graphical methods in terms of velocity and acceleration diagrams are introduced.

Statics is the study of forces in equilibrium and hence leads to an appreciation of the design of structures.
Dynamics is the study of the relationship between force and motion. It tells us how to find the forces needed to cause a required motion or how to find the motion that will result from known forces. The dynamics section includes the concepts of momentum, work, power and energy and the elements of vibration.

When the forces are known, their effect on the components of the structure of a machine can be investigated, a process called stress analysis.

The course is concluded by a case study.

Tutors will be required to conduct 9 tutorials of 2 hours duration each and will also attend some surgeries. There are eight TV programmes and two audio-visual cassettes. The video materials will be available for viewing in the OUHK library. Tutors are expected to view these in their own time to become familiar with the contents.

There are four day-long classes on Saturdays or Sundays of which at least three must be attended by students in order to pass the course. Tutors will have to be present in each day long session for their group and guide the students.

Tutors are required to mark and comment extensively on four Tutor-marked assignments. Besides this, there will also be 8 CMA’s. Tutors may be appointed as script markers during the final examination.

Applicants must possess an honours degree in Mechanical Engineering or related subject and at least 2 years relevant working or teaching experience.

**APPLIED SCIENCE PROGRAMME**

**S205/BIOL S205**  
The Core of Life (5 credits; 1 semester)

Course Coordinator: Ms Maggie Wong (Tel: 2768 6809; email: ycwong@ouhk.edu.hk)

S205 is recommended for students who have an interest in the natural sciences and the environment. The course provides a solid and wide coverage of biological science for those who wish to proceed to any higher-level course in environmental studies upon which a good understanding of the biological sciences rests.

The course is divided into 5 units and will cover the following topic:

- Large biological molecules of life
- Composition of the cell
- Energy of Life
- Cell cycle and genetics
- Evolution and generation of diversity

Tutors will be required to grade, comment on and teach via 4 written assignments (TMAs) and to answer queries arising from these assignments.

Tutors are expected to take about the tutorial class. Also, they will attend surgeries on rotation. Telephone tutoring is also important. As information technology expands in affordable availability tutors will need to be accessible via e-mail and the use of OLE in which instruction will be given by OUHK.

Laboratory classes are led by tutors. There are two short laboratory classes: the Short laboratory held in the evenings which lasts for 3 hours.

Applicants will be expected to have both a solid Bachelor’s degree in a biological science and a Masters degree in at least one discipline within the biosciences. Preference will be given to applicants with a PhD that includes some aspect of biology or environmental biology relevant to Hong Kong. Experience in using OLE and a teaching qualification would be an advantage.
S301/Biol S301    Conservation and Biodiversity

Course Coordinator: Dr Fred Lee (Tel: 2768 6868; Email: wflée@ouhk.edu.hk)

This is a 5-credit blended course, intended for BSc in Environmental Studies and BSc in Applied Science (Biology and Chemistry).

Not only students shall be introduced to concepts of conservation and biodiversity, through hybrid learning, he/she shall gain facts, ideas and principles of biological sciences to contribute to relevant events in Hong Kong and beyond.

The course shall cover following topics:
- Overview, philosophy and introduction to conservation and biodiversity
- The state of conservation: Worldwide and in Hong Kong
- Biodiversity: taxonomic and ecological
- Hong Kong biodiversity: case studies
- Hong Kong conservation activity and actions

In addition to TMAs, assessment includes a Day School Performance and Day School Report as well as a final examination.

Applicants should have an honours degree preferably a higher degree in Biology, Biological Science or a discipline related to the subjects concern. Hands-on experience in local conservation and biodiversity projects would be an advantage.

S401/Biol S401    Contemporary Biology Development

Course Coordinator: Dr Fred Lee (Tel: 2768 6868; Email: wflée@ouhk.edu.hk)

This is a new 5-credit course for students pursuing the BSc Applied Science (Biology and Chemistry).

This course covers the topics relevant to the advanced knowledge and skills related to research and industrial applications in life science in particular biological science. Students will be trained to possess independent abilities in academic analysis and presentation skills by conducting the various learner-based projects.

The overall aims of this course are to expose students to frontier research areas in biological and life sciences. Students will develop an understanding of the basic principles of biology in relation to
contemporary issues. Through various learner-based activities, students will understand and appreciate
the methods and process of science, and be able to critically evaluate scientific research publications in
peer-reviewed journals as well as to broaden their knowledge base in scientific research topics.
Specifically, the course aims to cover the following topics:

- Molecular cell biology
- Genetically modified plants
- Cancer therapy
- Neuroscience
- Stem cell technologies
- Gene regulation

Tutors will be required to attend and supervise tutorials, surgeries, dayschools, and workshops if
necessary. They will also be required to grade assignments and give extensive comments on the
performance of learners. Tutors would be required to have their Internet connection including Web
browser and email facilities. They are expected to participate in the online discussion with learners in
all study related issues via e-mail and the use of OLE in which instruction will be given by OUHK.

Applicants should have a higher degree in Biological Science or a discipline related to the subjects
concern. Preference will be given to candidates with relevant professional and research experiences,
and teaching experiences in tertiary institutions.

ENVIRONMENTAL STUDIES AND SAFETY SCIENCE PROGRAMME

EN320/ ENVR S320  Environmental Impact Assessment (10 credits; 2 semesters)

Course Coordinator: Mr Allen Wan (Tel: 2768 6844; email: ckwan@ouhk.edu.hk)

This course aims to help and enhance course receivers to understand Environmental Impact Assessment.

The course aims to introduce, examine, analyse and explain the aspects of contemporary Environmental Impact
Assessment (EIA). Hong Kong is the focus against a background of global trends and practice in EIA. Although
this is a level 3 course in our BSc/BSc (Hons) Environmental Studies programme, it is suitable to all those who
have an interest in the process and system of EIA. As such, it will benefit course receivers working in a wide range
of environmentally aware industries and professions.
The course presentation will include as part of a comprehensive and interesting package, printed textual material, articles from environmental papers and journals, T.V. programmes and video cassettes, face-to-face tutoring, field excursions, expert-led seminars and process-oriented assignments.

Topics and study areas will include:
- Overview and philosophy of EIA
- EIA models of a multidisciplinary process
- EIA methodologies
- EIA content and components
- Ecological impact assessment and socio-economic impact assessments
- Environmental risk assessment
- EIA in Hong Kong and EIA lessons from developed and developing countries
- EIA trends and prospects

Assessment will be based on tutor-marked assignments and a 3 hour written examination. Learning will be based on a mastery philosophy and the 20 hours of tutorial time allocated will use an interactive teaching and learning mode. In addition, compulsory day schools lasting 3 hours may be arranged to build on HK EIA issues and scenarios.

Tutors should possess a BSc degree with Hons or a Masters degree or higher in science, engineering, town/urban planning/environmental science or equivalent. Experience in EIA is an added recommendation.

EN335/ENVR S335  Environmental Control, Monitoring and Modeling (10 credits; 2 semesters)

Course Coordinator: Dr Y H Yau (Tel: 2768 6827; Email: yhyau@ouhk.edu.hk)

EN335/ENVR S335 is a 10-credit, higher level course in the Bachelor of Science and Bachelor of Science (honours) degree in Environmental Studies. The course has a strong linkage with a middle-level course : T234 or T237/ENVR S237 - Environmental Control and Public Health. The purpose of this course material is to present design principles as applied in environmental engineering and plant operations. It aims to help students develop their technological knowledge in environmental control, monitoring and management.

The course is divided into four blocks with 12 self-study units inclusive. Principles and concepts on waste management, drinking water and wastewater treatment, air pollution control & modeling and noise pollution control & prediction, are included along with design methods for different types of environmental devices. Working examples are used extensively to illustrate the applications of principles to practical situations. Self-assessment questions are included at ends of most of the units to give the student a chance to test the understanding
of the material. Case studies and design problems of vary degrees of complexity, are selected to suit the need of the course and included in Appendix. Suggested recent references are presented as footnotes to show the student where additional information can be obtained.

The course contents are summarized below:

- **Block 1** provides background material for understanding of waste management. It contains a selection of treatment and disposal methods. Some students may have encountered much of the material in the unit 1 from the course of T234 or T237/ENVR S237. Therefore, this unit introduces basic, not comprehensive coverage, on relationship between pollutants and the biosphere, environmental legislations, how wastes move through the environment, and their effects on people and the environment. Unit 2 discusses the technical aspects of incineration with energy recovery and identify where environmental control measures must be taken to prevent another form of pollution occurring. Unit 3 covers landfill design. This includes the characterization of a landfill site, the assessment of risks that it poses, and the development and selection of remedies.

- **Block 2** presents a rather thorough introduction to traditional air pollution problems involving criteria pollutants, dispersion models and emission controls. Unit 4 introduces the concepts in air pollution management. This includes classification of air pollutants and formation of primary and secondary pollutants. Unit 5 discusses the mathematical models currently used by environmental professionals to assess the magnitude of air pollution problems, and how to avoid environmental and health impacts. Unit 6 introduces the methodology of chimney design.

- **Block 3** gives a general introduction to noise and vibration control techniques that are used frequently in the field of noise abatement. Units 7 and 8 give a general overview of noise concept, covering the basic acoustic and the scales, indices and ratings, and methods of predictions and control.

- **Block 4** presents a concise summary of present theory, with emphasis on the application of that theory to both municipal water and wastewater treatment problems. Units 9 and 10 focus on water and wastewater treatment systems for conventional pollutants. The design aspects of water and wastewater treatment systems are also covered.

There will be a total of five tutor-marked assignments (TMAs) spread throughout the course. TMA1 to TMA 4 relate to the course contents, whereas TMA5 is the final report of a mini project of individual student. Tutors shall provide guidance and supervision to the design and conduction of projects.

In addition, tutors are expected to meet with his/her groups in 8 tutorials and a series of surgeries throughout the course. To prepare students for the final examination, there will be a Revision Tutorial at the end of the course.
The course will contain at least three compulsory day schools (3 hours each) on Sunday, public holidays or weekday evenings. Various field visits would also be arranged to allow students to get hands-on experiences in environmental control, monitoring and modeling.

Tutors should have an honours degree in relevant disciplines. Preference will be given to those with a higher degree and working experience in environmental chemical engineering. Teaching experience is also desirable although not essential.

**S122/SCI S122 A Foundation Course in Biology and Earth Science (10 credits; 2 semesters)**

**Course Coordinator:** Ms Maggie Wong (Tel: 2768 6809; email: ycwong@ouhk.edu.hk)

S122 was developed at OUHK for people in Hong Kong. This foundation course in Biology and Earth Science aims:

- To bring students without an existing knowledge of biology and Earth Science into contact with key concepts and principles in current biology and Earth Science.
- To enable students who desire a refresher course in biology and earth science to update their knowledge.
- To provide students with a solid foundation in biological and Earth Sciences thus empowering them, if desired, to embrace further studies in degree programmes offered by the School of Science and Technology, OUHK.
- To help students to appreciate, value, assess, understand and enjoy the roles and position of biological and Earth Sciences in HKSAR, greater China and globally.

**Topic overview:**

S122 is broadly divided into two portions:

1. Biology consists of four units covering the central themes and topics which unify the science of life today. These themes include:
   - Chemical basis of life
   - energy transformations
   - DNA
   - plant and animal way of life
   - keeping life steady (homeostasis)
   - Evolution
   - Adaptation
   - Ecology
   - Biodiversity

2. Earth Science, like its biological counterpart, also consists of four units covering these topics:
   - This place on Earth: Hong Kong (geology and climate),
   - The shape of Hong Kong: landscapes
   - The shape of Hong Kong: coastlines
   - Dynamic landscapes: weathering
   - Dynamic landscapes: water, slopes and erosion
   - Landscape resources: soils and biota
   - Earth Science in action: visiting the earth in Hong Kong

The course is organized around two set textbooks, one in biology and one in earth science. Each text is supported by course companions which guide the students along a pathway of learning designed on the distance mode of educational delivery. At the time of writing, the earth science text is at the final edit stage before publication. Chapters from this text are included with the course materials interact with a group of students via Tutor Marked Assignments (TMAs). Tutors shall provide face to face and telephone tutorials, conduct surgeries, run two dayschools, lead three evening lab sessions and communicate with students through Online Learning Environment (OLE) discussion board.

As can be deduced from the topic overview, a strong local flavour exists. It is important that tutors of S122 can relate the concepts of the biological and Earth Sciences to the Hong Kong environment. Thus an interest in local (Hong Kong/South China) natural history, ecology, physical geography and geology is highly desirable.
Tutors should have a degree and or post-graduate qualifications in a biological science for the biology stream and similar qualifications in geography, geomorphology, earth science or geology for the Earth Science stream. Experiences in using OLE and a teaching qualification are added recommendations.

S205/BIOL S205 The Core of Life (5 credits; 1 semester)

Course Coordinator: Ms Maggie Wong (Tel: 2768 6809; email: ycwong@ouhk.edu.hk)

S205 is recommended for students who have an interest in the natural sciences and the environment. The course provides a solid and wide coverage of biological science for those who wish to proceed to any higher-level course in environmental studies upon which a good understanding of the biological sciences rests.

The course is divided into 5 units and will cover the following topic:

- Large biological molecules of life
- Composition of the cell
- Energy of Life
- Cell cycle and genetics
- Evolution and generation of diversity

Tutors will be required to grade, comment on and teach via 4 written assignments (TMAs) and to answer queries arising from these assignments.

Tutors are expected to take about the tutorial class. Also, they will attend surgeries on rotation. Telephone tutoring is also important. As information technology expands in affordable availability tutors will need to be accessible via e-mail and the use of OLE in which instruction will be given by OUHK.

Laboratory classes are led by tutors. There are two short laboratory classes: the Short laboratory held in the evenings which lasts for 3 hours.

Applicants will be expected to have both a solid Bachelor’s degree in a biological science and a Masters degree in at least one discipline within the biosciences. Preference will be given to applicants with a PhD that includes some aspect of biology or environmental biology relevant to Hong Kong. Experience in using OLE and a teaching qualification would be an advantage.

S301/BIOL S301 Conservation and Biodiversity

Course Coordinator: Dr Fred Lee (Tel: 2768 6868; Email: wflee@ouhk.edu.hk)

This is a 5-credit blended course, intended for BSc in Environmental Studies and BSc in Applied Science (Biology and Chemistry).

Not only students shall be introduced to concepts of conservation and biodiversity, through hybrid learning, he/she shall gain facts, ideas and principles of biological sciences to contribute to relevant events in Hong Kong and beyond.

The course shall cover following topics:

- Overview, philosophy and introduction to conservation and biodiversity
- The state of conservation; Worldwide and in Hong Kong
- Biodiversity: taxonomic and ecological
- Hong Kong biodiversity: case studies
- Hong Kong conservation activity and actions

In addition to TMAs, assessment includes a Day School Performance and Day School Report as well as a final examination.

Applicants should have an honours degree preferably a higher degree in Biology, Biological Science or a discipline related to the subjects concern. Hands-on experience in local conservation and biodiversity projects would be an advantage.

**S396/BIOL S396 Ecosystems**

**Course Coordinator:** Dr Fred Lee (Tel: 2768 6868; Email: wflee@ouhk.edu.hk)

This is a new 10-credit course for students pursuing the BSc Environmental Studies and BSc Applied Science (Biology and Chemistry).

This course covers the topics relevant to the advanced knowledge and skills related to research in the interactions between organisms and their environment that together form an ecosystem – which can range from a simple microbial community to the biodiverse rainforests of the tropics. Students will be trained to possess independent abilities in academic analysis and presentation skills by conducting the various learner-based projects.

The overall aims of this course are to expose students to frontier research areas in ecosystem science. Students will develop an understanding of the terrestrial environment as a habitat for a vast array of different organisms; the connections between them and their surroundings; and their resilience to anthropogenic changes – such as pollution and climate change. Students will also gain practical experience in ecosystem science – making observations in your locality, and using models to investigate processes essential to supporting life on Earth. This course will be adapted of existing course materials of S396 developed by OUUK and is compose of four blocks:

- Block 1 - Introduction to Ecosystems
- Block 2 - Balances and Cycles
- Block 3 - Ecosystem disturbance and resilience in a human-dominated world
- Block 4 - Interdependence
Tutors will be required to attend and supervise tutorials, surgeries, dayschools, and workshops if necessary. They will also be required to grade assignments and give extensive comments on the performance of learners. Tutors would be required to have their Internet connection including Web browser and email facilities. They are expected to participate in the online discussion with learners in all study related issues via e-mail and the use of OLE in which instruction will be given by OUHK.

Applicants should have an honours degree preferably a higher degree in Ecological Science, Biology or related disciplines. Preference will be given to candidates with teaching experiences in tertiary institutions, or equivalent. Experience in projects relevant to ecosystems would be an advantage.

S403/ENVR S403 Applications of Biology and Chemistry in Environmental Studies

Course Coordinator: Dr Y H Yau (Tel: 2768 6827; Email: yhyau@ouhk.edu.hk)

This course aims to develop students’ knowledge and skills in applied biology, chemistry for applications in environmental science and technology. After studying this course, students will be able to design environmental control devices and monitoring strategies on the basis of the principles in biology, chemistry and environmental science; design and operate of models for accurate predictions of environmental impacts on the basis of their applied science knowledge and skills. Working examples are used extensively to illustrate the applications of principles to practical situations.

Topics and study areas will include:
- Waste management
- Water and wastewater treatment
- Air pollution control and modeling,
- Noise and vibration models and control
- Design concepts of various types of environmental control and monitoring devices.

There will be a total of five tutor-marked assignments (TMAs) spread throughout the course. TMA1 to TMA4 relate to the course contents, whereas TMA5 is the final report of a mini project of individual student. Tutors shall provide guidance and supervision to the design and conduction of projects.

The course will contain at least three compulsory dayschools (3 hours each). Various field visits would also be arranged to allow students to get hands-on experiences in environmental engineering and design.
Tutors should have an honours degree in relevant disciplines. Preference will be given to those with a higher degree and working experience in environmental science and technology. Teaching experience is also desirable although not essential.

**S411/ENVR S411  Environmental Health and Safety**

Course Coordinator: Mr Allen Wan (Tel: 2768 6844; email: ckwan@ouhk.edu.hk)

Students will be introduced to theories of environmental health and safety.

The course aims to cover the following areas:
- Principles of environmental health and safety management
- Accidents, threats and risks with relevance to the environment
- Evaluation and assessment of environmental health and safety impacts
- Management and control of environmental health and safety
- Policies, legislations and regulations with regard to environmental health and safety
- The Occupational Safety and Health Ordinance and its Regulations
- The Factories and Industrial Undertakings Ordinance and its Regulations
- Monitoring and Audit of EHS
- Promotion of EHS and training

More importantly, local practices on how to design, control, implement and manage EHS risks will be addressed.

Tutors are responsible for marking four tutor-marked assignments and the final examination.

Applicants should have an honours degree in Environmental and /or Health and Safety Science discipline. Relevant local experience and /or teaching experience would be an advantage.

**U216/ENVR S216  Environment: Change, Contest and Responses**

Course Coordinator: Mr Allen Wan (Tel: 2768 6844; email: ckwan@ouhk.edu.hk)

The course U216 offers a range of resources to facilitate student’s understanding with regard to environmental issues. This is an inter-disciplinary course that exploring the scientific, technological, political and social backgrounds to the various relationships, processes and activities through which humans and non-humans are linked together.

This course aims to:
• Address the causes, consequences, and significance of environmental changes.
• Use examples to show why and how environmental issues often become the subject of contest and conflict at the local, regional, and global scale.
• Analyse how environmental action around such controversies is shaped by the values of and the power associated with the various parties involved.
• Explore how environments and human responses to environmental change and how the latter one act according to the different interpretation of risk and uncertainty.
• Discuss the constraints and opportunities for sustainable forms of development.
• Explore all the above issues in a variety of environmental contexts at different geographical scales.

The course covers the following topics:

• Understanding Environmental Issues
• Changing Environments
• Contested Environments
• Environmental Responses

There are regular tutorials and surgeries with your tutors throughout the course. Tutors are required to lead all tutorials but surgeries are attended by tutors on rota basis.

Tutors are responsible for marking six tutor-marked assignments and the final examination.

This course is supported by the Online Learning Environment (OLE). Tutors must actively participate in using this media to communicate with your students and the Course Coordinator.

Applicants should have an honours degree in environmental sciences or related areas. Preference will be given to those working in the environmental field. Teaching experiences in tertiary institution, or postgraduate qualifications in the subject discipline, education, or equivalent area would be an advantage.

**E-learning Course 網上學習科目**

EN881CW/ENVR S881CW 環境管理職份和領導力

學科主任：何建宗教授（電話：2768 6800）

本科內容包括：

• 領導學理論
• 環境領導學的特質
NURSING PROGRAMME

BACHELOR OF NURSING PROGRAMME

NU310/NURS S310  Professional Nursing Practice (10 credits; 2 semesters)

Course Coordinator: Ms Ng Ting Yan, Bernadette (Tel: 2768 6863)

NU310/NURS S310 is a higher level course in the Bachelor of Nursing programme. This course attempts to explore the theoretical, research and other critical issues that related to professional nursing practice.

This course aims to:

• to expand students’ understanding of the theoretical and research perspectives in nursing
• to develop students’ readiness in the areas of professional responsibility, accountability and critical mindedness

Contents:
The course covers the following topics:
• Theoretical nursing
• Designing clinical nursing research
• Data analysis
• Power and politics in nursing
• Leadership and nursing
• Managing change and stress in nursing

There are four tutor-marked assignments in this course. Tutors are expected to hold regular tutorials of two hours every month throughout the course.

Applicants must have at least an honours degree in relevant discipline, such as nursing or health sciences. Having working experience in health care setting will be a distinct advantage.

HIGHER DIPLOMA IN NURSING PROGRAMME

NU104C/NURS S104C  精神健康（五學分；一學期）

學科主任：黃家輝先生（電話：2768 6812）

NU104C/NURS S104C 是精神健康護理學高級文憑課程中的一個必修基礎科目，以中文教學為主，尤為適合新生修讀。本科旨在幫助學員認識精神健康的概念和了解精神障礙的根源與治療，建議學員在修讀其他中級和高級程度科目之前先修本科。此外，學員修讀本科時須同時修讀 NU202C/NURS S202C 行為科學(護士科目)。
目標：
本科旨在幫助學員認識和了解精神健康的概念，心理社會因素與身心疾病的關係，及人生階段中常見的精神障礙，為將來修讀治療性精神護理科目打下良好的基礎。

內容：
本科共有五個修讀單元。各修讀單元的主要內容列舉如下：
- 精神健康導論
- 兒童及青少年的精神障礙
- 心身疾病
- 成人的精神障礙
- 高齡人仕的精神障礙

輔學服務：
本科安排三十小時的輔學活動，其中包括十小時導修課，八小時日間課堂，及十二小時補習課。

成績評核：
本科成績的評核，是以三份導師評改作業和一次3小時的期終考試為標準。導師亦有責任輔導學生編寫作業及在學期終結前為學生提供總複習。

指定教科書：
本科使用下列教科書：
Peterson, C 著，杜仲傑等譯 (2002) 《變態心理學》，台北，桂冠圖書股份有限公司。

申請資格：
本科導師須最少具備護理學或與精神健康相關學科的榮譽學士資歷，具有高等學位或相關工作經驗的申請人將獲優先考慮。

NU202C/NURS S202C 行為科學 (護士科目) （十學分; 兩學期）

學科主任：湛綺莊小姐（電話：2768 6855）

NU202C/NURS S202C 行為科學是護理學高級文憑課程中的一個必修科目。修讀時間為兩個學期，學分值為十學分。NU202C/NURS S202C 是一個介紹心理學、社會學和人際關係與溝通的導入科目，以中文教學為主。本科目為中級程度，建議學生在選修本科科目前先修護理學高級文憑課程的基礎程度科目。

目標：
本科旨在幫助學員認識和了解在心理學、社會學上和護理學有關的課題，從而明白個人行為和人與人之間的互動，並能加以掌握其學理及應用於護理實務上。此外，本科亦結合了人際關係與溝通的理論與技巧，幫助學員認識溝通的主要概念，並擴展他們在護理工作上的溝通能力。

內容：
本科共有十個修讀單元。各修讀單元的主要內容列舉如下：
- 心理學與身心發展
- 認識這個世界：感受、知覺、學習
- 個人的差異：動機、情緒、態度、人格
- 心理與健康
- 與他人的聯繫：社會
- 醫療與社會
- 人際溝通
- 人際溝通的基礎技巧
- 護理實務上的人際溝通
- 醫護職系間的溝通

輔學服務：
本科設有五十八小時的輔學活動，其中包括二十四小時導修課，十小時日間課堂，及二十四小
時補習課。

成績評核：
本科成績的評核，是以四份導師評改作業和一次 3 小時的期終考試為標準。導師亦有責任輔導學生編寫作業及在學期終結前為學生提供總結溫習。

指定教科書：
本科使用下列教科書：
寧新利（2005）《心理學》（第 3 版），台北，心理出版社。
鄭佩芬（2000）《人際關係與溝通技巧》，台北：揚智文化事業股份有限公司。

申請資格：
本科導師須最少具備護理學或相關行爲學科的榮譽學士資歷，具有高等學位或相關工作經驗的申請人將獲優先考慮。

NU213C/NURS S213C 專科護理學（五學分；一學期）

學科主任：植熙媛小姐 （電話：2768 6869）

NU213C/NURS S213C 專科護理學是護理學高級文憑課程中的一個必修科目。修讀時間為一個學期，學分值為五學分。NU213C/NURS S213C 是一個介紹香港護士管理局「註冊護士（普通科）課程大綱」所指定的專科護理學科的入門科目，以中文教學爲主。本科目合乎基礎程度，學生應先對一般的臨床護理學有所認識，所以建議學生在選修本科前先修讀 NU112C/NURS S112C 成人及兒童護理學（一）及 NU212C/NURS S212C 成人及兒童護理學（二）。

目標：
本科旨在幫助學生認識和了解社區護理學及高齡護理學。以深入淺出的指導方式爲學生介紹此兩門專科護理學的基礎知識。此外，有鑑於一般普通科護士對精神科認識的缺乏，本科學科亦對精神科護理學作引介，以幫助普通科護士了解精神病的基礎知識及護理原則，並能接觸精神病患者及協助他們康復。

內容：
本科共有五個修讀單元，各修讀單元的主要內容列舉如下：
- 社區護理學導論
- 社區護理實務
- 高齡護理學導論
- 高齡護理實務
- 精神科護理學概論

輔學服務：
本科設有三十小時的輔助学活動，其中包括十小時導修課、八小時日間課堂及十二小時補習課。

成績評核：
本科成績的評核，是以四份導師評改作業及一次 3 小時的期終考試，導師亦有責任輔導學生編寫作業及在學期終結前為學生提供總結溫習。

指定教科書：
本科使用下列教科書：
徐震主編（1997）《老人醫療及護理實務》，台北，桂冠圖書股份有限公司。

申請資格：
本科導師須最少具備護理學榮譽學士學位，具有高等學位或相關專科護理工作經驗的申請人將獲優先考慮。
NU214C/NURS S214C 治療性精神護理學（二）（十學分；兩學期）

學科主任：黃家輝先生（電話：2768 6812）

NU214C/NURS S214C 是精神健康護理學高級文憑課程中一個必修科目，修課時間為兩個學期，學分值為十學分。NU214C/NURS S214C 是一個有關精神科護理的基礎與相關知識的科目，以中文教學為主。本科目為中級程度，學生修課本科前須先修讀 NU114C/NURS S114C 治療性精神護理學（一）。

目標：
本科旨在幫助學員認識和了解精神科護理、精神健康條例及與精神科護理相關的倫理知識，以深入淺出的指導方式幫助學員掌握其學理及應用於護理實務上。此外，本科亦介紹精神科常用急救學及生理障礙護理，有助學員在精神科護理工作上的需要。

內容：
本科共有十個修讀單元，各修讀單元的主要內容如下：
• 老年精神病護理導論
• 精神科藥物護理導論
• 物質濫用精神病護理導論
• 精神科康復導論
• 社區精神科護理導論
• 精神科常用急性學概論
• 精神病患生理障礙護理概論
• 與精神科護理相關的法例、倫理和管理概論

輔導服務：
本科設有五十八小時的輔導服務，其中包括二十四小時導修課、十小時日間課堂，及二十四小時補習課。

成績評核：
本科成績的評核，是以四份導師評改作業和一次3小時的期終考試為標準。導師亦有責任輔導學生編寫作業及在學期終結前為學生提供總結溫習。

指定教科書：
本科使用下列教科書：
Stuart, G. & Laraia, M. 著，王美雲等譯（2005）《精神科護理學》，台北：五南圖書出版公司。

申請資格：
本科導師須具備護理學的榮譽學士，並具相關護理工作經驗。具有較高等學位的申請人將獲優先考慮。