

PTH2003	Elementary Putonghua
PTH3001	Putonghua III (1 unit)
PTH3031	Putonghua in Current Affairs (1 unit)

- (ii) Nursing and Pharmacy Major students exempted from the Chinese language requirement for admission by the Senate are required to complete, as determined by the Major School (by a small group convened by the Associate Pro-Vice-Chancellor and Registrar from 2006-07 onwards):

- (a) 3 units of Chinese, OR
- (b) 3 or 6 units of Elementary Chinese, OR
- (c) 3 units of Chinese or Elementary Chinese and 3 units of Cantonese, OR
- (d) 3 units of Chinese or Elementary Chinese and 3 units of Putonghua.

Elementary Chinese

CHI1210	University Elementary Chinese
CHI1530	Oral Communication Skills

Chinese

CHI1510	Business Chinese
CHI1520	Chinese for Executives
CHI1586	Creative Writing in Chinese

Cantonese

CAN2013	Cantonese
CAN3013	Intermediate Cantonese

Putonghua

PTH1001	Putonghua I (1 unit)
PTH2001	Putonghua II (1 unit)
PTH2003	Elementary Putonghua
PTH3001	Putonghua III (1 unit)
PTH3031	Putonghua in Current Affairs (1 unit)

- Notes: 1. Students who do not have HKALE AS “Use of English” results are required to complete an English language course as determined by the Major School in consultation with the English Language Teaching Unit.
2. The above courses are 3-unit courses, unless otherwise specified.

B. Applicable to S6 entrants admitted in 2004-05 and thereafter

1. Expository Writing

All Nursing and Pharmacy Major students are required to complete a 3-unit English language expository writing course, as determined by the Major School in consultation with the English Language Teaching Unit (ELTU).

2. English

- (i) All MB ChB students are required to complete MED1220 Communication for Medical Students.
- (ii) All Nursing Major students are required to complete two 3-unit elective courses offered by ELTU.
- (iii) All Pharmacy Major students are required to complete ELT1411 English for Pharmacy I (2 units) in their 1st year of study, ELT3411 English for Pharmacy II (1 unit) in their 3rd year of study, and one 3-unit elective course offered by ELTU.

3. Chinese

- (i) MB ChB students exempted from the Chinese language requirement for admission by the Senate are required to complete, as determined by the Faculty (by a small group convened by the Associate Pro-Vice-Chancellor and Registrar from 2006-07 onwards):
- (a) 3 units of Chinese, OR
 - (b) 3 or 6 units of Elementary Chinese, OR
 - (c) 3 units of Chinese or Elementary Chinese and 3 units of Cantonese, OR
 - (d) 3 units of Chinese or Elementary Chinese and 3 units of Putonghua.

The courses for selection are as follows:

Elementary Chinese

CHI1210	University Elementary Chinese
CHI1530	Oral Communication Skills

Chinese

CHI1510	Business Chinese
CHI1520	Chinese for Executives
CHI1586	Creative Writing in Chinese
CHI1815	Professional Chinese (MED)

Cantonese

CAN2013	Cantonese
CAN3013	Intermediate Cantonese

Putonghua

PTH1001	Putonghua I (1 unit)
PTH2001	Putonghua II (1 unit)
PTH2003	Elementary Putonghua
PTH3001	Putonghua III (1 unit)
PTH3031	Putonghua in Current Affairs (1 unit)

- (ii) Nursing and Pharmacy Major students, including mainland students proficient in Cantonese but excluding those in (iii) and (iv) below, are required to complete one of the following courses:

CHI1510	Business Chinese
CHI1520	Chinese for Executives
CHI1586	Creative Writing in Chinese
CHI1815	Professional Chinese (MED)

- (iii) Nursing and Pharmacy Major students who come from the Mainland and are not proficient in Cantonese are required to complete 3 units of Chinese and 3 units of Cantonese. The courses for selection are as follows:

Chinese

CHI1510	Business Chinese
CHI1520	Chinese for Executives
CHI1586	Creative Writing in Chinese
CHI1815	Professional Chinese (MED)

Cantonese

CAN2013	Cantonese
CAN3013	Intermediate Cantonese

- (iv) Nursing and Pharmacy Major students exempted from the Chinese language requirement for admission by the Senate are required to complete, as determined by the Major School (by a small group convened by the Associate Pro-Vice-Chancellor and Registrar from 2006-07 onwards), 6 to 12 units of Chinese, Elementary Chinese, Cantonese or Putonghua. The courses for selection are as follows:

Elementary Chinese

CHI1210	University Elementary Chinese
CHI1530	Oral Communication Skills

Chinese

CHI1510	Business Chinese
CHI1520	Chinese for Executives
CHI1586	Creative Writing in Chinese
CHI1815	Professional Chinese (MED)

Cantonese

CAN2013	Cantonese
CAN3013	Intermediate Cantonese

Putonghua

PTH1001	Putonghua I (1 unit)
PTH2001	Putonghua II (1 unit)
PTH2003	Elementary Putonghua
PTH3001	Putonghua III (1 unit)
PTH3031	Putonghua in Current Affairs (1 unit)

Note: The above courses are 3-unit courses, unless otherwise specified.

C. Applicable to students admitted in 2003-04

1. English

MB ChB, Nursing and Pharmacy Major students with Grade “E” in HKALE^Δ AS “Use of English” are required to complete one of the following courses in their first year of attendance:

ELT1107	English Improvement Strategies for Listening and Speaking
ELT1108	English Improvement Strategies for Reading and Writing

2. Chinese

- (i) MB ChB and Pharmacy students with Grade “E” in HKALE^Δ AS “Chinese Language and Culture” are required to complete CHI1410 Chinese for Faculty of Medicine in their first year of attendance.

- (ii) Nursing Programme students with Grade “E” in HKALE^Δ AS “Chinese Language and Culture” are required to complete one of the following courses in their first year of attendance:

CHI1410	Chinese for Faculty of Medicine
*CHI1650	Chinese Communication for Faculty of Medicine

^Δ Only applicable to students admitted on the strength of HKALE results. The HKALE results to be deemed necessary for the Faculty language requirement must be obtained in that particular sitting of HKALE which the University has used to assess the admission qualification of the student concerned.

* Course offered in 2003-04 or before.

MB ChB Programme

Course List

<i>Code</i>	<i>Course Title</i>	<i>Length of Study</i>
Medical Year One		
UGC293Z	Health and Society I (Required General Education course for medical students)	1st Term
MED1293	Health and Society II	2nd Term
MED1100	Integrated Medical Sciences	2 Terms
MED1200	Skills Modules	2 Terms
MED1220	Communication for Medical Students	2nd Term
SSM1000	Selected Study Modules (SSM) A) SSM1001 - 1100 Human Structure SSM B) SSM1101 - 1999 Topical SSM	2 Terms
Medical Year Two		
MED2293	Health and Society	2nd Term
MED2100	Integrated Medical Sciences	2 Terms
MED2200	Skills Modules	2 Terms
SSM2000	Selected Study Modules (SSM) A) SSM2001 - 2300 Healthcare Database Analysis B) SSM2301 - 2600 2-Day Journal Paper Analysis C) SSM2601 - 2999 5-Day Journal Paper Analysis	2 Terms
Medical Year Three		
MED3293	Health and Society	Year
MED3100	Integrated Medical Sciences	Year
MED3200	Skills Modules	Year
SSM3000	Selected Study Modules (SSM) A) SSM3001 Medical Research	7 weeks
MED3110	Junior Medical Clerkship	8 months
MED3210	Junior Surgical Clerkship	8 months
MED3510	Combined Clinical Examination	
Medical Year Four		
MED4010	Community and Family Medicine	} 1 year
MED4110	Obstetrics and Gynaecology	
MED4210	Paediatrics	
MED4310	Psychiatry	
MED4200	Skills Modules	
SSM4000	Selected Study Modules (SSM) (teaching embedded in Year 4 modules)	
MED4410	Electives	6 weeks
MED4510	Combined Clinical Examination	

Medical Year Five

MED5110 and 5210	Senior Medical Clerkship and Senior Surgical Clerkship	} 1 year
MED5200	Skills Modules	

Course Description

Medical Year One

UGC293Z/MED1293

Health and Society I & II

This course enables students to understand some of the broader concepts of health, disease and disease prevention. The objectives include: 1) to understand essential public health principles and practices; 2) to be familiar with various modes of health care delivery and financing; 3) to appreciate the importance of evidence-based health care; 4) to regard patients in their holistic setting; as members of a family and a community; 5) to establish caring attitudes; and 6) to value the importance of medical ethics and the need for clinicians to meet high ethical standards.

MED1100

Integrated Medical Sciences

In Medical Year One the Integrated Medical Sciences course includes six major areas of study.

The *Cardiovascular-Respiratory System Panel* offers a series of lectures on cardiovascular histology and physiology in Year 1. These basic science topics are integrated vertically with clinical topics in Year 3.

The *Foundation Studies* is an integrated course covering the structural, physiological and molecular basis of cell and tissue functions in the human body. This course intends to provide a solid foundation upon which the students can embark onto the system-based and more advanced areas of their medical education.

The *Gastroenterology and Nutrition* study is to acquire basic principles and concepts of gastrointestinal physiology and to understand the pathophysiological basis of gastrointestinal diseases. The histology of the gastrointestinal tract is also studied in relationship to functions.

The *Homeostasis* study mainly focuses on regulation of body fluid volumes, osmolarity, electrolytes, and acid-base balance by the kidney. The concept of homeostasis is introduced. The study of how body metabolism is integrated under different physiological states to maintain energy supply to cells is also covered.

The *Human Structure* study provides students with a working knowledge and terminology of human body parts. This serves as a basis for: 1) understanding the organization and function of the body systems; 2) clinical examination and execution of procedures commonly encountered in general practice; and 3) acquiring a set of professional vocabulary to be used in communicating with fellow professionals and the layperson.

The *Musculo-skeletal* study introduces the students to the biomedical sciences related to the musculoskeletal system and the scope of clinical problems related to injury or dysfunction of the musculoskeletal system. Students are asked to think critically and thoroughly about the composition, structure and functions of the musculoskeletal tissues, organs and their organizations.

MED1200

Skills Modules

The skills course focuses on clinical methods, communication skills and life-long learning skills. The objective of this course is to develop the students' ability to become competent doctors with the appropriate knowledge, skills and attitudes that will help them meet the challenges of our changing health care needs and service demands and requirements.

During the *Clinical Methods* course, students learn how to solve a clinical problem using a hypothesis testing approach. It teaches students how to pose questions, perform physical examination and clinical procedures to reach a diagnosis and make a clinical decision, based on evidence and patient's preference. Clinical examples are used to demonstrate the clinical relevance of structures and functions of various systems and their inter-dependency to maintain a healthy functional state. Students also visit different clinical departments to appreciate the multidisciplinary and interdependent nature of disease management, ranging from health promotion, prevention, and treatment to rehabilitation. Students will be taught initially in the Clinical Skills Learning Centre (CSLC) using manikins and simulated patients, followed by practice in real life situations. Throughout the course, the CSLC remains a focal point where clinical skills will be consolidated under guided teaching and continuous assessment.

The component for *Communication Skills* is designed for students to learn and practise basic communication and presentation skills in four workshops: non-verbal communication, questioning, active listening, responding and public speaking. The course uses a smaller group format with videotaped role-play interviews, with observation and constructive feedback by tutors and classmates as the instructional format.

The section for *Life-long Learning Skills* is designed for students to first acquire an internationally recognized standard of competency in information technology literacy. Upon completion, students are introduced to the techniques and technologies that clinicians use in the practice of evidence based medicine (i.e. *assess, ask, acquire, appraise, and apply* clinical evidence to patient care). In the first year, students are required to learn how to phrase a clinical question (so that a clinical answer can be found), where to locate relevant information (so that the most appropriate medical information databases are used for different clinical queries), and how to compose effective search strategies for a variety of medical information databases (so that available evidence will be successfully located). Students are also introduced to the basic statistical models which are frequently used to analyze and report many of the findings in clinical research.

MED1220

Communication for Medical Students

This required English course for all Medical Year One students will be run in the second term. This course will focus on communication and writing skills for medical students.

SSM1000

Selected Study Modules

SSM goes beyond the limits of the core teaching and allows students to study in depth in areas of interest of their selection and aims at cultivating insights into scientific methods and encouraging self-directed study. In the first year, SSM includes selections from three different SSM sub-modules: University General Education courses, *Human Structure* and critical review *Topical SSM*.

Medical Year Two

MED2293

Health and Society

The *Family Follow-up Project* provides a unique opportunity for students to observe the growth of a child from birth to three years of age in a normal family environment rather than in a hospital setting. At the end of the project, students will be able to appreciate the influences of the socio-economic background of the family, the health beliefs and practices, and social support on childcare and family adjustment. This project also provides a unique opportunity for students to learn the techniques of interviewing and the development of long-term relationships with a client family.

MED2100

Integrated Medical Sciences

In Medical Year Two the Integrated Medical Sciences course includes eight major areas of study.

The *Cardiovascular-Respiratory System Panel* offers two modules of studies in Year 2. The first is on respiratory histology and physiology and the second on respiratory medicine and therapeutics. These modules are integrated horizontally in this academic year.

The *Gastroenterology and Nutrition* study provides students with the knowledge of nutrition in health promotion, disease prevention and the treatment of common gastrointestinal diseases. During this period, students will also learn the pharmacology of drugs acting on the liver and the gastrointestinal tract.

The *Haematology, Infection and Immunity* study delivers two main consecutive modules of teaching in the second and third years of the curriculum. Contents of second year teaching include basic haematology, basic immunology, and general microbiology including bacteriology, mycology, parasitology, virology and antimicrobials.

The *Homeostasis* study concentrates on the role of the endocrine system in maintaining a stable internal environment within the human body. Basic principles of endocrine control and functions of hormones from major endocrine glands are introduced, and these serve to form the basis for understanding the pathophysiology and therapeutic treatment of endocrine disorders.

The *Human Structure* study provides students with a working knowledge and terminology of human body parts. This serves as a basis for: 1) understanding the organization and function of the body systems; 2) clinical examination and execution of procedures commonly encountered in general practice; and 3) acquiring a set of professional vocabulary to be used in communicating with fellow professionals and the layperson.

The *Mechanisms of Disease and Therapeutic Approaches* study focuses on the understanding of mechanisms underlying the development and progression of disease, which discusses the logical and effective administration of therapeutic interventions or strategies. The course covers: 1) the molecular basis of disease; 2) pathological processes in tissues; 3) general principles of neoplasia; 4) pathology of injury (forensic medicine); and 5) pharmacology and therapeutics.

The *Musculo-skeletal* study introduces the students to the biomedical sciences related to the musculoskeletal system and the scope of clinical problems related to injury or dysfunction of the musculoskeletal system. Students are asked to think critically and thoroughly about the composition, structure and functions of the musculoskeletal tissues, organs and their organizations.

The *Neuroscience* study provides a framework on structure and function of central and peripheral nervous systems, and on clinical diagnosis and treatment of diseases related to the human nervous system. The second-year teaching focuses on the basic function and organization of the nervous tissues and their clinical relevance in pathological states.

MED2200

Skills Modules

The skills course focuses on clinical methods, communication skills and life-long learning skills. The objective of this course is to develop the students' ability to become competent doctors with the appropriate knowledge, skills and attitudes that will help them meet the challenges of our changing health care needs and service demands and requirements.

During the *Clinical Methods* course, students learn how to solve a clinical problem using a hypothesis testing approach. It teaches students how to pose questions, perform physical examination and clinical procedures to reach a diagnosis and make a clinical decision, based on evidence and patient's preference. Clinical examples are used to demonstrate the clinical relevance of structures and functions of various systems and their inter-dependency to maintain a healthy functional state. Students also visit different clinical departments to appreciate the multidisciplinary and interdependent nature of disease management, ranging from health

promotion, prevention, treatment to rehabilitation. Students will be taught initially in the Clinical Skills Learning Centre (CSLC) using manikins and simulated patients, followed by practice in real life situations. Throughout the course, the CSLC remains a focal point where clinical skills will be consolidated under guided teaching and continuous assessment.

The components for *Communication Skills* focus on understanding the patient's perspective and the patient-doctor relationship. Students will learn components why patients have come to consult their doctor and what their agenda, i.e. concerns and expectations, are. Students will learn how to develop rapport with the patient by considering the context and the impact of the illness on his/her life, family and work. A medium-sized group format with videotaped role-play interviews, observation, and constructive feedback by tutors and classmates, will be used. Students will also get an opportunity to be attached to the hospital to interview newly admitted patients and report their experience in small groups.

The *Life-long Learning Skills* in year two continues to develop the students' skills for the practice of evidence based medicine (i.e. the ability to *assess, ask, acquire, appraise,* and *apply* clinical evidence to patient care). Students are required to learn and apply the rules of evidence for each of four major types of clinical investigations: 1) therapy/prevention; 2) harm/causation; 3) prognosis; and 4) diagnostic tests. Topical coverage is coordinated with the other two skills panels. Additional relevant statistical models are also addressed.

SSM2000

Selected Study Modules

In the second year there are three different categories of *Selected Study Modules*, namely university general education, computer-aided database analysis project (First Term, 52 protected hours) and journal paper reviews (Second Term, 112 protected hours). In groups of six and guided by teachers, students will conduct an analysis of a healthcare or medical related database. The project enables them to learn and apply their analytical as well as statistical skills. In the critical review of journal papers, students will undertake four modules, which allows them to learn and practise the basic principles of critical analysis of published data and evidence-based approach to medicine and health information.

Medical Year Three

MED3293

Health and Society (PHES3)

This is an interdisciplinary course which examines the broad concepts of health and society with particular reference to the society of Hong Kong. Discussion topics include learning and memory, personality, family dynamics, behavioural determinants of health, hospitalization, death and bereavement, patient compliance and the social welfare system in Hong Kong. Students will be guided to gain insight into patients as an individual, a family member and a community member. Principles of medical ethics will also be discussed.

The Family Follow-up Project provides a unique opportunity for the students to observe the growth of a child from birth to three years of age in a normal family environment rather than in hospital setting. The programme's objectives are that, at the end of the programme, the students will be able to appreciate the influences of the socio-economic background of the family, the health beliefs and practices, and social support on child care and family adjustment. This project also provides a unique opportunity for students to learn about interviewing and the development of long-term relationships with a client family.

MED3100

Integrated Medical Sciences

In Medical Year Three, the Integrated Medical Sciences course includes eight major areas of study:

The *Cardiovascular-Respiratory System Panel* offers a series of lectures on

cardiovascular medicine and pharmacology in Year 3. Together with the topics on respiratory medicine and therapeutics in Year 2, they form the groundwork for students to function as junior clerks in the wards.

Gastroenterology and Nutrition enables students to be familiar with nutritionally related diseases commonly encountered due to nutritional deficiency or over-nutrition and to develop the attitudes and skills in nutrition advice for disease prevention.

Haematology, Infection and Immunity delivers two main consecutive modules of teaching in the second and third years of the curriculum. Contents of the year-three teaching include immune problems in transplantation, congenital or acquired immune deficiency, aging and cancers; understanding of immunotherapy, understanding of the general approach to anaemias, cytopenias/cytosis, bleeding and thrombotic disorders, and the basic concept of transfusion, working knowledge and understanding of prevention, diagnosis and management of infectious diseases caused by bacteria, viruses and parasites, understanding of how antimicrobial resistance occurs and spreads, and the understanding of the importance of judicious use of antimicrobial agents.

The *Homeostasis* teaching comprises of ten clinical sessions, which are divided into two blocks. The first five clinical sessions deal with topics on endocrine and metabolic diseases, with one additional lecture session devoted to cover the pathology of endocrine glands/tumours. The remaining five clinical sessions are on renal medicine and urology. These clinical sessions are mostly lecture-based and represent integrative clinical-pathological teaching. Some are supplemented with clinical demonstrations or tutorials to better illustrate the clinical presentation of diseases and to provide more opportunity for discussing the principles of diagnosis and treatment of patients.

Mechanisms of Disease and Therapeutic Approaches provides a firm scientific base to understand the mechanisms of disease, and to relate these to sound therapeutic principles and measures. This course completes the year-two teaching on the General Principles of Neoplasia, and on Pharmacology and Therapeutics and concludes with a module in Forensic Medicine.

In the third year curriculum in *Musculo-Skeletal*, common and major clinical problems in orthopaedics and traumatology are introduced with the aim to highlight their uniqueness in clinical practice. Basic principles of clinical practice in musculoskeletal problems will be emphasized with the aims to prepare the students for their clinical modules in the Years Four and Five. Integrated approaches will be highlighted throughout the teaching programme.

Neuroscience in Year Three provides students with the clinical skills to assess patients with neurological disorders by means of history taking and examination. Students will learn how to adopt a multidisciplinary approach to assessment and treatment of some neurological disorders, particularly those causing long term disabilities. The main teaching on neurological examination will take place during the Junior Clerkships.

Reproduction, Sex, Human Development and Growth (PREP3) provides a detailed knowledge of reproduction and those aspects of the early and later stages of embryonic development relevant to the reproductive system and to the management of normal and abnormal pregnancy and childbirth. Students will gain an understanding of the pathological processes which may affect reproduction, pharmacology of reproduction and the special requirements of prescribing in the young and in the elderly. The principles of genetics applied to clinical problems and the principles of the biological processes of ageing, and their relevance to the management of diseases in the elderly will be included. The course will bring an awareness of the importance of social, ethical and legal issues surrounding reproduction, development and ageing.

MED3200

Skills Modules

Clinical Methods (PCLM3)

Based on the learning experience in PCLM1 and PCLM2 and in collaboration with

Communication Module and Clinical Module, Clinical Methods aims to further consolidate students' ability to use history taking and physical examination to gather relevant clinical information to create problem lists and differential diagnoses.

Student's skills in case presentation and discussion will be strengthened through practice and feedback in small groups and under guidance. The Clinical Skills Learning Centre (CSLC) will be used as a resource centre to clarify inconsistencies and queries relating to clinical methods which may be encountered by students during their clinical attachments in different hospitals and clinics.

Communication Skills (COSK3)

Students will learn how to apply the skills learnt in COSK 1 and COSK 2 in obtaining a relevant clinical history. Furthermore, students will be taught the following skills:

- Ability to listen and observe the verbal and nonverbal messages from the patients
- Ability to take a clinical history and look after the patient's and the doctor's agenda
- Ability to handle the feelings and emotions of the patients during history taking
- Ability to share the understanding with the patient during the process of history taking.

Life Long Learning Skills (LSK3)

In this third year of the medical programme, the nature of coverage in Life Long Learning Skills focuses initially on learning additional evidence-based medicine (EBM) review criteria, specifically for critiquing published systematic reviews. Six hours of relevant instruction and workshops in critiquing relevant published systematic reviews are scheduled. Students' summative assessments are based on critiquing relevant articles via small group assignments.

Subsequently students will begin to learn the life long process of how to clinically judge if and when published clinical research findings (pertaining to therapeutic interventions, harm exposures, diagnostic tests, and/or prognostic indicators) can or should be incorporated into or considered directly relevant to the clinical care of one's patients. Seven hours of these latter EBM practice sessions will be provided during each rotation in Medicine and Surgery.

Students will be given clinically appropriate EBM assignments while in junior Medical and Surgical Clerkship and will be required to prepare a written presentation describing if relevant research exists and if so whether the findings should meaningfully inform the clinical care of the designated clinical problem. These written assignments represent a form of continuous assessment and are designed to develop the students' clinical decision making abilities within a clinical practice context of clinical practice that is appropriately informed by clinical research.

SSM3000

Selected Study Modules (SSM)

SSM3001

Medical Research

In Medical Year Three students will have to undertake a "Medical Research SSM". After the first and second years, it is generally believed that third year students will have developed their ability to independently pursue areas of interest and research. With further guidance, students should be reasonably capable of carrying out some simple research work by themselves. The aim of the "Medical Research SSM" is to provide an experiential opportunity for students to progress in this area. Furthermore, for potential students, it may also pave the way for them to take a one-year Intercollegiate Degree Programme in Medical Sciences.

The "Medical Research SSM" of the third year, as compared with the first and second years SSM, will be a much longer and more in-depth project. Over a dedicated period of seven full weeks in the Medical Year Three curriculum, this research-oriented project will be a single study, either in laboratory science or clinical medicine. With contributions from different teaching departments, the "Medical Research SSM" provides a multidisciplinary perspective to the programme as a whole and in addition, caters for the particular interest of individual students.

Free choice of research areas will enable students to explore critically and master comprehensively, subjects and disciplines that excite their curiosity.

MED3110/MED3210

Junior Medical Clerkship/Junior Surgical Clerkship

Students will be allocated to medical and surgical wards in various hospitals and will be taught to take histories and examine patients on a daily basis and subsequently to present their findings to their colleagues and their clinical teachers. They would also learn how to manage patients with different medical or surgical problems. In the surgical rotations, they would also have the opportunity to observe and participate in operative procedures in the operating theatres.

MED3510

Combined Clinical Examination

At the end of the year, students will be assessed on their clinical clerkships through a Combined Clinical Examination which constitutes part of their Second Professional Examination.

Medical Year Four

Students will rotate through four Clinical Modules. During each rotation students will undertake four Department-based Selected Study Modules (SSM) and at the end of the year each student will select and organize an elective (these SSM and elective activities account for 30% of the course). To proceed to Year 5 students are required to pass each of the four Clinical Module examinations as well as the Combined Clinical Examination.

SSM4000

The SSM programme in the fourth year is designed to provide students with an opportunity to gain an in-depth understanding of a clinical problem or area of healthcare services delivery of the four specialties, namely Community and Family Medicine, Obstetrics and Gynaecology, Paediatrics and Psychiatry. The four specialized SSM projects are to consolidate the students' knowledge, skills and research ability through studying a specific topic.

In Medical Year Four, the SSM programme will be embedded in the four rotation modules. However, participation of teachers from other departments in the delivery of the SSM, where appropriate, is encouraged. Students will be required to do four different SSM projects, one in each of the specialties. In a 10-week module, they will spend approximately 1.5 weeks in the SSM.

To allow creativity and flexibility in the SSM, there will be no prescribed formats for the department-based exercises. However, the title, educational objectives, operational details and deliverables of all SSM projects require documentation and prior approval by the SSM Committee.

Assessment of all SSM comprises 2 parts; a written report of the SSM and an oral presentation to their peers in the module.

Students must pass all SSM assessment to be eligible for promotion to Year 5.

MED4010

Community and Family Medicine

This course provides ten weeks of integrated teaching in Community and Family Medicine.

In Community Medicine, three major areas are covered: Epidemiology, Public Health Practice, and Occupational & Environmental Health. Students will be introduced to the major public health problems in Hong Kong, the social behavioural and environmental determinants of health, and the prevention and control of communicable and non-communicable diseases. In addition to didactic lectures, students will learn the subject areas through active participation in problem-solving exercises, field visits and presentations in seminars and tutorials.

The clinical clerkship in Family Medicine aims at teaching the students to understand how

medical conditions and health problems are presented in primary care settings reflecting the day-to-day health problems in the community. Throughout the clerkship, the students will be taught on basic principles and practice of family medicine in providing primary, comprehensive, holistic approach and continuing care as well as high prevalent problems encountered at primary care level, e.g. psycho-social problems or Travel Medicine or non-specific complaints. These teaching will take place in form of seminars, tutorials, clinical attachments, consultation skills laboratory, video recording discussion and self directed learning packages. There is clinical teaching at the University Family Medicine Clinics and Teaching Units (Lek Yuen Health Centre, Prince of Wales Hospital Family Medicine Training Centre, Kwong Wah Hospital Family Medicine Training Centre), and also at Family Medicine clinics run by private practitioners and institutions, both in public and private settings. Continuity of care and communication skills are emphasized in the context of the family and community, together with the principles of the assessment and management of problems presenting at an early stage in undifferentiated ways.

In the Selected Study Module (SSM), students will have the opportunity to gain deeper insight to selected problems in family medicine and public health.

The students are assessed on the theory and practice of Community Medicine and Family Medicine in both written and clinical examinations.

MED4110

Obstetrics and Gynaecology

Within this 10-week module, students will undergo 4 clinical rotations which are mainly based at the Prince of Wales Hospital: 1) antenatal clinic and ward; 2) gynaecology clinic and ward; 3) labour ward; and 4) O&G services in affiliated hospitals. Core materials will be covered in lectures and formal tutorials, supplemented by bedside teaching.

During their antenatal attachment, students will gain understanding of normal pregnancy, of the growth and development of the unborn child, and will acquire competency in performing obstetrics examinations.

In the labour ward attachment, students will participate in the care and delivery of normal pregnancies, as well as observe operative deliveries. They will be introduced to common problems and emergencies in childbirth and the postpartum period.

Within the gynaecology rotation, students will encounter common conditions, problems, and tumours affecting the female reproductive tract. They will also acquire competency in gynaecological examination. Communication skills in taking history and conducting discussions on issues regarding sexuality and reproduction will be emphasized.

Students will also have the opportunity to attach to the O&G unit of one of the following affiliated hospitals: Princess Margaret Hospital, Tuen Mun Hospital, United Christian Hospital, Alice Ho Miu Ling Hospital, and Northern District Hospital.

A Selected Study Module (SSM) will be incorporated into this module. Each group will present their findings to the class and tutors.

MED4200

Skills Modules

Clinical Methods (PCLM4) and Communication Skills (COSK4)

In the fourth year of the medical programme, the teaching of Clinical Methods and Communication Skills will be incorporated into the module teaching.

Life Long Learning Skills (LLSK4)

In the fourth year of the medical programme, students continue to learn the life long process of how to clinically judge if and when published clinical research findings can or should be considered relevant to the clinical care of one's patients. Five hours of Evidence-based Medicine (EBM) practice sessions will be provided during each rotation in Psychiatry, Paediatrics, Obstetrics and Gynaecology and Community and Family Medicine.

Students will be required to make written and/or oral presentations to their peers and

supervising clinical teachers indicating whether existing research can and/or should meaningfully inform the care of patients they have seen during ward rounds or in outpatient clinics. These presentations are designed to develop the student's clinical decision making abilities within a practice context that is appropriately informed by available, relevant research.

MED4210

Paediatrics

During this 10-week clinical module in paediatrics students will participate in a range of activities in the wards and outpatient clinics of the Prince of Wales Hospital, other regional hospitals, the Maternal and Child Health Centres, Child Assessment Centres and Hong Chi Pinehill School. System Panel teaching and core paediatric lectures will be combined with bedside and tutorial teaching. For their Selected Study Modules, students will prepare a problem-oriented case presentation, selected from topics within the Faculty's different System Panels, and use this presentation as the focus for the development of an extended matching multiple choice question.

MED4310

Psychiatry

The core objectives of this 10-week course in psychiatry are to enable the students to: 1) understand the relationship between the psychological, biological and social aspects of psychiatric disorders; 2) acquire basic practical knowledge in diagnosing and managing psychiatric disorders of major public health concern; and 3) get acquainted with the organization of psychiatric services in Hong Kong. To this end, a variety of teaching methods are employed including seminars, small-group tutorials, attendance of ward rounds, case conferences, academic lectures and outpatient clinics and visits to several psychiatric facilities (hospitals and community facilities). In the second part of the course, during a 10-day Selected Study Module, students will be given the opportunity to gain deeper insight into selected areas of psychiatry in terms of working up complicated cases or studying various theoretical problems.

Reproduction, Sex, Human Development and Growth Panel (PREP)

The PREP4 course is a continuation of the PREP3 syllabus. In this second part of the course, it provides basic knowledge to medical students about human growth and development, and is arbitrarily divided into 4 major sections. The first section of the course concerns the physiology and health problems of newborn infants in the perinatal period. The second section outlines the normal and abnormal postnatal growth and development patterns in childhood. The third section covers the psychological aspects in a growing child and human sexuality. Finally, the fourth section discusses the mechanism of family life cycle and problems associated with aging. In addition, there are lectures on genetics and prescribing in infancy and for the elderly. The Year 4 PREP panel covers physiological, psychological and pathological aspects of 1) growth and development; 2) human sexuality; and 3) aging. The lectures of the PREP panel will be integrated into the clinical module teaching of Year 4.

MED4410

Elective

Under the guidance of, and with the approval of, the Coordinator of Clinical Electives, each student will arrange an attachment of the student's choice in Hong Kong or overseas, in order to broaden the student's medical horizons.

MED4510

Combined Clinical Examination

This examination, held at the end of Medical Year Four, is coordinated by the four Clinical Departments. The examination consists of an integrated short answer written paper and a structured clinical viva examination.

Medical Year Five

MED5110 and 5210

Senior Medical Clerkship and Senior Surgical Clerkship

During Year Five the Senior Medical Clerkship will consist of two ten-week modules involving small group attachments to wards under the supervision of Department of Medicine and Therapeutics, and Department of Clinical Oncology and one-week attachments to the Intensive Care Unit and Department of Diagnostic Radiology and Organ Imaging. The attachment will include a total of 15 weeks at Prince of Wales Hospital and 5 weeks at Alice Ho Miu Ling Nethersole Hospital in Tai Po. Students will work alongside with qualified colleagues to gain direct hands-on clinical experience in the form of apprenticeship. They will also receive small group bedside teaching on each ward. In the afternoons subspecialty teaching will be given on three days per week and will cover all 13 major medical specialties.

Additional activities will include short courses in critical care medicine and in evidence-based medicine, and multidisciplinary sessions which will liaise both with Surgery and with basic sciences to cover important revision topics prior to the final examinations.

The Senior Surgical Clerkship will consist of two ten-week modules involving small group attachments to wards under the supervision of Department of Surgery, Department of Orthopaedics and Traumatology, Department of Ophthalmology and Visual Sciences, Department of Anaesthesia and Intensive Care, Department of Diagnostic Radiology and Organ Imaging and the Accident and Emergency Medicine Academic Unit.

The attachment will include rotations in the Prince of Wales Hospital, North District Hospital, Pamela Youde Nethersole Eastern Hospital, and Hong Kong Eye Hospital. Students will work alongside with qualified professionals to gain direct hands-on clinical experience in the form of apprenticeship. They will also receive small group bedside teaching on each ward. Clinical management of patients in various specialties and essential clinical skills for junior doctors are the main highlights in our programme.

MED5200

Skills Modules

This Year Five Skills Modules will be embedded in the medical and surgical modules teaching. In the fifth year, the final evidence-based medicine topic addressed is decision analysis. Students will be trained in the construction of decision trees and the use of a clinician-friendly computerized program which facilitates constructing these trees and using them to enhance clinical decisions.

Study Scheme

The First Year is the foundation year. The core components, which constitute 70% of the curriculum, will be taught by means of System Panels which run through the first three years. These System Panels provide the basic professional knowledge relevant for clinical practice. Medical Year One students will be required to complete the following System Panels : Cardiovascular-respiratory (PCAR), Foundation Studies (PFOS), GI/Nutrition (PGIN), Health and Society (PHES), Homeostasis (Renal, Endocrinology and Metabolism) (PHOM), Human Structure (PHUS) and Musculo-Skeletal (PMUS). Year One students have to pass the First Professional Examination before promotion to Year Two.

In the Second and the Third Years, students are required to complete Cardiovascular-Respiratory (PCAR), Gastroenterology and Nutrition (PGIN), Haematology, Infection and Immunity (PHAE), Health and Society (PHES), Homeostasis (Renal, Endocrinology and Metabolism) (PHOM), Human Structure (PHUS), Reproduction, Sex, Human Development and Growth (PREP), Mechanisms of Diseases and Therapeutic Approaches (PMDT), Musculo-Skeletal (PMUS) and Neuroscience (PNEU). Medical Year Three students have to pass the

Second Professional Examination before promotion to Year Four.

The curricula in the first three years have strong emphasis on skills which will be taught through the Skills Modules; namely, Clinical Methods (PCLM), Communication Skills (COSK) and Life Long Learning Skills (LLSK). These Skills Modules become increasingly integrated into the clinical modules teaching beginning in the second half of the third year and extending into the Fourth and Fifth Years.

In the Fourth Year, students will rotate among attachments to four Clinical Departments, namely, Community and Family Medicine, Obstetrics and Gynaecology, Paediatrics, and Psychiatry. By the end of the year, they shall sit for Part I of the Third Professional Examination in these four subjects and the Combined Clinical Examination. Students will take their Clinical Elective at the end of the Fourth Year.

In the Fifth Year, students will be attached to the medical and surgical wards and also the outpatient clinics. They will assist the House Officers in the care of the patients under supervision. Students will attend rotations through various associated medical and surgical disciplines during the year. At the end of the modules, they have to sit for Part II of the Third Professional Examination in Medicine and Surgery.

Medical students are required to pass both the Professional Examinations and periodic assessment of individual subjects and modules for admission to the Bachelor Degrees. Graduates in Medicine are required to serve one-year's internship at a recognized hospital. After satisfactory completion of internship, graduates will be qualified to apply for registration as a registered medical practitioner.

For the Selected Study Modules (SSM), which constitutes 30% of the time of the whole curriculum, Year One students are required to take one Human Structure SSM and one Topical SSM in the first year. At the end of the year, students' oral and poster presentations for SSM assessment will be conducted in the form of a whole-day Conference Presentation.

Year Two students will have to undertake two Selected Study Modules, namely, 1) Healthcare Database Analysis and 2) Journal Paper Analysis. In the first term, students are required to do a critical review of a healthcare related database and write a short report. In the second term, they have to complete two separate projects each for the 2-Day Modules and 5-Day Modules of Journal Paper Analysis.

Year Three students will have a free choice research areas in doing "Medical Research SSM" over a period of seven weeks.

Year Four students will have an opportunity to gain an in-depth understanding of a clinical problem on areas of healthcare services delivery of the four specialties, namely, Community and Family Medicine, Obstetrics and Gynaecology, Paediatrics and Psychiatry in their SSM projects.

Faculty Language Requirement

Intercalated Degree Programme in Medical Sciences

(Applicable to students admitted to the MB ChB Programme in 2001-02 and thereafter)

Course List

<i>Code</i>	<i>Course Title</i>	<i>Length of Study</i>
MED3810	Guided Study I	Term 1
MED3820	Guided Study II	Term 2
MED3830/3840	Seminar I/II	Term 1 & 2
MED3860	Research Project	from July to May
MED3880	Research Techniques	10 weeks
MED6002/6003	Biostatistics	10 weeks
	Laboratory Safety	10 weeks

Course Description

MED3810

Guided Study I

The student will be assigned reading of the literature relevant to his research by his supervisor in the first term. Essays on selected topics shall be written and submitted to his supervisor and Department for assessment.

MED3820

Guided Study II

This is a continuation of MED3810 which takes place in the second term.

MED3830/3840

Seminar I/II

This is a two-term course. The student shall be required to present his research and reading of the literature to the Department and other interested staff of the Faculty of Medicine.

MED3860

Research Project

This is a two-term course. A research project is to be designed and carried out under the guidance of a Department supervisor. The results of the research shall be written and submitted in the form of a dissertation which must show clear evidence of the student's original work. A viva voce will be conducted by an External Examiner, the Department Chairman, the supervisor and selected Faculty members.

MED3880

Research Techniques

The student is introduced through a series of tutorials of current methods of biomedical research, e.g. molecular studies of both DNA and RNA, cell biology, morphologic analysis, proteomics, protein analysis, clinical trials, animal models, etc.

MED6002/6003

Biostatistics

1/1 U; 1st, 2nd term

This is a two-term course in biostatistics which is compulsory to be taken during the course for Intercalated Degree Programme in the Faculty of Medicine. There will be course work and a pass is required to graduate.

Assessment

Students will be assessed on their performance in the courses listed above and where the Department wishes, by a written examination set by the Department covering topics relevant to the Department's discipline and the area of the student's research.

Weighting of courses

(For students admitted after Year 3)

Course	Weighting
Integrated Medical Sciences (Year 1, MED1100)	3
Integrated Medical Sciences (Year 3, MED3100)	3
Guided Study I (MED3810)	3
Guided Study II (MED3820)	3
Seminar I/II (MED3830/3840)	3
Research Project (MED3860)	21
Biostatistics (MED6002/6003)	P/F
Laboratory Safety	P/F
Research Techniques	P/F
Total	<hr/> 36

Students must pass all courses listed.

Weighting of courses

(For students admitted after Year 2)

Course	Weighting
Integrated Medical Sciences (Year 1, MED1100)	6
Guided Study I (MED3810)	3
Guided Study II (MED3820)	3
Seminar I/II (MED3830/3840)	3
Research Project (MED3860)	21
Biostatistics (MED6002/6003)	P/F
Laboratory Safety	P/F
Research Techniques	P/F
Total	<hr/> 36

Students must pass all courses listed.

Study Scheme

On completion of the first two or three years of the MB ChB curriculum, students may apply for admission to the one-year Intercalated Degree Programme in Medical Sciences. The aim of the Programme is to give those medical students with the affinity for medical research the opportunity to develop their interest at an early stage. Students admitted under the Early Admissions Scheme are especially encouraged to apply. In the 47-week Programme, students will be attached to a Department and undergo guided study, seminars, as well as

receive instructions in research project design, culminating in carrying out a research project under supervision.

After satisfactory completion of the Programme, the student shall be awarded the degree of Bachelor of Medical Sciences with honours classifications and shall continue the rest of the MB ChB curriculum.

Bachelor of Nursing Programme

This is a four-year full-time undergraduate nursing degree programme. Graduates of this programme will be prepared for registration as General Nurse in accordance with the regulations of the Nursing Council of Hong Kong.

Course List

<i>Code</i>	<i>Course Title</i>
Required Courses	
NRS1051	Development of Nursing
NRS1052	Communication and Health Assessment
NRS1053	Fundamentals of Nursing
NRS1054	Public Health and Epidemiology
*NRS1200, 1210	Clinical Practice IA, IB
NRS1201	Clinical Practice I
NRS1220	Clinical Practice IC
NRS1320	Introduction to Behavioural and Social Sciences
NRS1400, 1410	Anatomy I, II
NRS1600, 1610	Physiology I, II
NRS2200, 2210	Clinical Practice IIA, IIB
NRS2300	Health Psychology
NRS2321	Health Promotion
NRS2322	Complementary and Alternative Medicine
NRS2323	Nursing Informatics
NRS2324	Professional Nursing Issues
NRS2325	Sociology and Health Care
NRS2400	Microbiology
NRS2500	Ethical and Legal Issues in Nursing
NRS2700	Clinical Microbiology
NRS3011	Nursing in the Community
NRS3012	Nursing in the Hospital
NRS3013	Nursing in Clinical Specialties I
NRS3014	Nursing in Clinical Specialties II
NRS3015	Nursing Research
NRS3200, 3210	Clinical Practice IIIA, IIIB
NRS3201	Clinical Practice IIC
NRS3220	Clinical Practice IIIC
NRS4011, 4012	Nursing for Complex Health Needs I, II
NRS4201	Clinical Practice IV
NRS4600	Coordinating Nursing Practice

* Courses offered in 2004-05 and before.

Course Description

NRS1051

Development of Nursing

1st term

The aim of this course is to enable students to develop their understanding of the evolution and development of nursing. In particular, it focuses on the development of the philosophy and knowledge base in nursing.

NRS1052

Communication and Health Assessment

1st term

This course will provide students with opportunities to develop their knowledge and skills on communication and health assessment. The development of interviewing techniques and psychomotor skills fundamental to health assessment will be emphasized. In addition, effective integration of communication skills in health assessment will be accentuated.

NRS1053

Fundamentals of Nursing

2nd term

This course aims to equip students with the knowledge and fundamental nursing skills for promoting the health and wellness of clients.

NRS1054

Public Health and Epidemiology

1st term

This course aims to develop students' knowledge and understanding of public health and epidemiology and to evaluate the contribution of these disciplines to the nursing care of individuals, families and communities in Hong Kong.

NRS1201

Clinical Practice I

2nd term

Clinical practice in the first year aims to provide students with experiences in a range of community and hospital settings. Students will be facilitated to develop communication, health assessment and nursing skills that promote clients' health and wellness.

NRS1220

Clinical Practice IC

2nd term

Clinical practice in the first year aims to provide students with experiences in a range of hospital settings. Students will be facilitated to develop communication, health assessment and nursing skills that promote clients' health and wellness.

NRS1320

Introduction to Behavioural and Social Sciences

1st term

This course will enable students to understand different theories and concepts from the behavioural and social sciences that are relevant to nursing and/or health care.

NRS1400, 1410

Anatomy I, II

1st and 2nd terms

The aim of these courses is to provide students with a basic knowledge of human topographical anatomy with particular emphasis on those aspects of special significance in nursing practice. The course will run concurrently with that in physiology and the syllabus will be integrated so that students will be able to correlate structure and function.

NRS1600, 1610

Physiology I, II

1st and 2nd terms

The aim of these courses is to enhance the students' knowledge and understanding of how the body adapts physiologically to internal and external environmental changes. There will be a focus on the physiological principles of normal cells, tissue and system functioning which will form the basis for studying health promotion, pathology and nursing care. The course content will be integrated with that offered in Anatomy.

NRS2200, 2210

Clinical Practice IIA, IIB

1st and 2nd terms

Clinical practice running throughout the second year provides students with the opportunity to apply principles, concepts, and theories for family and community assessment to patients/clients in the hospital and community setting. The main focus is on the further development of knowledge and skills needed for the care of clients in medical, surgical, gerontological, orthopedic, and community settings.

NRS2300

Health Psychology

1st and 2nd terms

The focus of this course will be to draw upon the foundations of psychology from a health-illness perspective. The consequences of illness and the impact of hospitalization for individuals, families and society will be examined and support systems identified.

NRS2321

Health Promotion

2nd term

The aim of this course is to develop students' understanding of the role of the nurse in health promotion in working with individuals, groups, families and communities. Emphasis will be on the application of the principles of health promotion to critiquing programmes relevant to local current and predicted health needs.

NRS2322

Complementary and Alternative Medicine

1st term

The aim of this course is to introduce students to the efficacy, choice, use and explanatory mechanisms of complementary and alternative medicine using a range of selected therapies. A regional focus will be the health concepts of Chinese medicine (including *tai chi*, *qigong*, and acupuncture) and the scope and responsibilities of the nurse's role within this field in Hong Kong.

NRS2323

Nursing Informatics

1st term

The aim of this course is to develop students understanding of the application of technology in the processing of information for nursing practice and research. The main areas for study will be the systems available for hospital information and nursing management, client assessment and monitoring, decision support and client and nurse education.

NRS2324

Professional Nursing Issues

1st term

This course will enable students to integrate their knowledge and skills about professional issues into a comprehensive understanding of health care. In addition, this course will enhance educational and professional self-direction.

NRS2325

Sociology and Health Care

1st term

This course is designed to provide students with a sociological perspective on health and illness, which is applicable to nursing practice in Hong Kong. From this perspective, students will examine the social forces, which promote health and prevent illness in society.

NRS2400

Microbiology

2nd term

This course aims to provide students with an understanding of the characteristics of major groups of micro-organisms including bacteria, fungi, viruses and parasites and an insight into their nursing and medical significance. An introduction to host-parasite relationships and the interaction of micro-organisms to the environment will equip nurses with principles guiding nursing intervention and the control of infection.

NRS2500

Ethical and Legal Issues in Nursing

2nd term

This course will develop the students' understanding of legal and ethical issues as they apply to nursing. It will focus on : 1) legal principles governing professional practice in Hong Kong including torts, contract, confidentiality, informed consent and related ordinances; 2) basic ethical principles and theories as they relate to nursing practice; and 3) ethical issues and dilemmas encountered in practice.

NRS2700

Clinical Microbiology

1st term

This course aims to provide students with an understanding of the diseases in humans caused by different microbial pathogens. Emphasis will be placed on clinical and nursing aspects including diagnosis and treatment, epidemiology and prevention strategies, methods of surveillance, development of control of infection policies and the clinical impact of infection control teams in the hospital and community.

NRS3011

Nursing in the Community

1st term

This course aims to provide a theoretical foundation to community-based nursing and nursing for the older people. Emphasis will be placed on home-based assessment and management of common health problems in various community settings. Formulation of appropriate nursing diagnoses and application of evidence-based nursing interventions in the planning and delivery of care will be included.

NRS3012

Nursing in the Hospital

2nd term

This course provides the theoretical basis for comprehensive nursing care to clients with mild to moderate health problems in hospitals. The pathophysiological basis and pharmacological treatment of the identified conditions will be examined together with the principles of therapeutic management and nursing procedural skills. Students will learn to assess, plan and implement appropriate evidence-based nursing interventions to reduce or overcome the effects of these conditions.

NRS3013

Nursing in Clinical Specialties I

1st term

This course emphasizes the application of nursing interventions, critical thinking, and research evidence to caring for pediatric and adult patients whose health alterations are associated with pathophysiologic changes and/or with mental illness. Students are equipped with the knowledge and skills to provide nursing interventions to promote health outcomes for clients with moderate to severe health problems in various clinical specialties.

NRS3014

Nursing in Clinical Specialties II

2nd term

This course emphasizes the application of nursing interventions, critical thinking, and research evidence to caring for adult patients whose health alterations are associated with physiologic and/or pathophysiologic changes. Students are equipped with the knowledge and skills to provide nursing interventions to promote health outcomes for clients with moderate to severe health problems in various clinical specialties.

NRS3015

Nursing Research

2nd term

This course will provide students with an understanding of the principles of nursing research and build on their knowledge of evidence based nursing. Emphasis will be given to introducing students to the use of qualitative and quantitative research methods, research design and research questions in practice to enable students to carry out a critical review of the literature in a particular area of clinical practice.

NRS3200, 3210

Clinical Practice IIIA, IIIB

1st and 2nd terms

These clinical practice courses aim to develop students' skills in planning and implementing individualized care for clients with significant changes in physical and mental health status in a variety of health care settings. Opportunities will be provided to develop students' ability in clinical reasoning and problem solving in different client care situations. The main focus will be on integrating and applying knowledge and skills needed for the care and promotion of wellness of clients in medical, surgical and specialty areas.

NRS3201

Clinical Practice IIC

2nd term

Clinical practice running throughout the second year provides students with the opportunity to apply principles, concepts, and theories for family and community assessment to patients/clients in the hospital and community settings. The main focus is on the further development of knowledge and skills needed for the care of clients in medical, surgical, gerontological, orthopedic, and community settings.

NRS3220

Clinical Practice IIIC

2nd term

This clinical practice course aims to develop students' skills in planning and implementing individualized care for clients with significant changes in physical and mental health status in a variety of health care settings. Opportunities will be provided to develop students' ability in clinical reasoning and problem solving in different client care situations. The main focus will be on integrating and applying knowledge and skills needed for the care and promotion of wellness of clients in medical, surgical and specialty areas.

NRS4011, 4012

Nursing for Complex Health Needs I, II

1st term

These courses will integrate practice with theory and be comprised of the nature of caring for individuals across developmental stages that are at risk or who have complex health problems. The courses will enable students to explore the factors which contribute to the complexity of changes in health: cultural differences, socioeconomic resources, high risk groups, level of bio-psychosocial disability, severity of illness and adaptation ability.

NRS4201

Clinical Practice IV

2nd term

Clinical practice in Year 4 will provide opportunities for students to identify and analyse the effect of complex changes in health and the impact of multiple health agencies on clients. Students will be expected to demonstrate competence in the delivery of holistic care for clients with complex health problems and to promote health across a whole life-span. Additionally, students need to demonstrate responsibility for their own actions in decision making about nursing interventions, evaluating practice and managing care for a group of patients, under the supervision of experienced nurses. Students are expected to work collaboratively with the health care team in the delivery of care to clients.

NRS4600

Coordinating Nursing Practice

1st term

This course will enable students to extend their theoretical and skill based knowledge in co-ordinating individual client care to organising the care groups of clients in both hospital and community settings. Emphasis will be on leadership and management skills and the importance of multidisciplinary teamwork.

Study Scheme

1. Major Programme

A. Applicable to students admitted in 2005-06 and thereafter

First Year of Attendance

1st term : NRS1051, 1052, 1400, 1600
 2nd term : NRS1053, 1201, 1410, 1610, 2400
 At the end of 2nd term : NRS1220

Second Year of Attendance

1st term : NRS1054, 1320, 2200, 2700, 3011
 2nd term : NRS2210, 2321, 2500, 3012
 At the end of 2nd term : NRS3201

Third Year of Attendance

1st term : NRS2322, 2323, 2324, 3013, 3200
 2nd term : NRS2300, 3014, 3015, 3210
 At the end of 2nd term : NRS3220

Fourth Year of Attendance

1st term : NRS2325, 4011, 4012, 4600
 2nd term : NRS4201

B. Applicable to students admitted in 2004-05

First Year of Attendance

1st term : NRS1051, 1052, 1200, 1400, 1600
 2nd term : NRS1053, 1210, 1410, 1610, 2400
 At the end of 2nd term : NRS1220

Second Year of Attendance

1st term : NRS1054, 1320, 2200, 2700, 3011
 2nd term : NRS2210, 2321, 2500, 3012
 At the end of 2nd term : NRS3201

Third Year of Attendance

1st term : NRS2322, 2323, 3013, 3200
 2nd term : NRS2324, 3014, 3015, 3210
 At the end of 2nd term : NRS3220

Fourth Year of Attendance

1st term : NRS2300, 2325, 4011, 4012, 4600
 2nd term : NRS4201

Requirement for Graduation

Graduation from the Bachelor of Nursing programme requires that students successfully complete:

- (i) required Nursing courses (or alternative courses for those granted exemptions), and
- (ii) 12 units of General Education courses, and
- (iii) 2 units of Physical Education courses, and
- (iv) pass all clinical assessments.

2. Faculty Language Requirement

Bachelor of Pharmacy Programme

The Bachelor of Pharmacy (B.Pharm.) degree is awarded on satisfactory completion of at least three years of full-time study. To be considered for registration by the Pharmacy and Poisons Board as practising pharmacist in Hong Kong, the student must complete a further year of pre-registration training as required by the Board.

Course List

<i>Code</i>	<i>Course Title</i>	<i>Unit</i>
PHA1000	Introduction to Pharmacy	2
PHA1110	Fundamentals of Organic Chemistry	2
PHA1211, 1212	Dosage Form Science I, II	2 each
PHA1311, 1312	Basic Dispensing Techniques I, II	3, 2
PHA1421, 1422	Biochemistry/Biotechnology I, II	1, 3
PHA1431, 1432	Anatomy/Physiology I, II	3 each
PHA1440	Microbiology	1
PHA2110	Medicinal Chemistry	3
PHA2130	Pharmaceutical Analysis	3
PHA2210	Dosage Form Science III	3
PHA2220	Biopharmaceutics and Pharmacokinetics	2
PHA2310	Pharmacy Practice I	3
PHA2320	Pharmacy Law	2
PHA2411, 2412	Pharmacology and Therapeutics I, II	3 each
PHA2510	Pharmacognosy I	3
PHA2710	Pharmaceutical Research Methods and Techniques	2
PHA3310	Pharmacy Practice II	3
PHA3411, 3412	Pharmacology and Therapeutics III, IV	3 each
PHA3510	Pharmacognosy II	3
PHA3611, 3612	Pharmacy Clerkship/Project I, II	3, 9

Course Description

PHA1000

Introduction to Pharmacy

2 U; 2 Lect.; 1st term

Introduces the entering pharmacy students to the profession of pharmacy; introduces various pharmacy practice environments such as hospital pharmacy, industry, academic research and community pharmacy; explores the scope of pharmacy and examines the roles of pharmacists in our current healthcare system; introduces the concept of clinical pharmacy and pharmaceutical care. The objective of this course is to deepen students' understanding of pharmacy and also to enhance students' ability to communicate effectively and work efficiently as a team.

PHA1110

Fundamentals of Organic Chemistry

2 U; 1 Lect. 0.5 Tut. 1.5 Prac.; 2nd term

Provides an understanding of the processes involved in organic chemical reactions and the importance of stereochemistry in drug action and drug development. The theory and basic operation techniques of volumetric, gravimetric, ultraviolet, visible and infra-red spectroscopy and thin layer chromatography systems will also be discussed.

PHA1211, 1212

Dosage Form Science I, II

2 U each; 1 Lect. 0.5 Tut. 1.5 Prac.; 1st, 2nd term

Examines the physico-chemical principles relevant to drug formulation and manufacturing; the properties of pharmaceutical materials (crystalline or amorphous substances) and their characterization; rheology; reaction kinetics in relation to drug decomposition and accelerated stability tests. Emphasis will be on the formulation of solution, emulsion and suspension dosage forms. Relevant topics in solution chemistry and surface chemistry will be covered.

PHA1311, 1312

Basic Dispensing Techniques I, II

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 1st term

2 U; 1 Lect. 0.5 Tut. 2 Prac.; 2nd term

Provides an introduction to dispensing techniques; professional ethics in dispensing; the prescription and drug dosages; preparation of simple solutions, powders, suspension, ointments, creams, pastes and suppositories; labelling and packaging; product information sources. Sterilisation processes in the manufacturing of pharmaceuticals and the related techniques including aseptic dispensing will also be introduced.

PHA1421, 1422

Biochemistry/Biotechnology I, II

1 U; 1 Lect.; 1st term

3 U; 2 Lect. 2 Prac.; 2nd term

Introduces students to the structure and function of chemical constituents of living systems; physico-chemical properties of buffer systems, amino acids, proteins, carbohydrates, lipids, nucleic acids, hormones and vitamins; enzymes and reaction kinetics; the major metabolic pathways; molecular biology and the regulation of gene expression; modern biotechnological principles; application of biotechnology to discover novel drugs and to design new therapeutic approaches. Case studies will be included to introduce the importance of pharmacogenetics.

PHA1431, 1432

Anatomy/Physiology I, II

3 U each; 3 Lect. 0.25 Prac.; 1st, 2nd term

Provides a system-based review of the structure and function, normal as well as abnormal, of cells, organs and systems. Emphases will be placed on those structures/functions that affect drug actions, and those that are affected by common drugs.

PHA1440

Microbiology

1 U; 1 Lect.; 2nd term

Provides students with an introduction to fundamental microbiology and infectious diseases. Attention is focused on the clinical aspects of the main bacterial, fungal, viral and parasitic infections.

PHA2110

Medicinal Chemistry

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 1st term

Introduces the principles of drug design and the development of new therapeutic agents from prototype compounds derived either from natural sources, or which are semi-synthetic or wholly synthetic. Structure-activity relationships (SAR) and quantitative SAR in drug design/development will be discussed in detail. Special topics will include pro-drugs, enzyme inhibitors and drug metabolism.

PHA2130

Pharmaceutical Analysis

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 2nd term

Examines the theory and application of analytical methods and spectroscopic/spectrometric techniques such as atomic emission (AE) and atomic absorption (AA), infrared (IR), ultraviolet (UV), fluorimetry, mass and proton nuclear magnetic resonance (NMR); separation methods such as high performance liquid chromatography (HPLC) and gas chromatographic (GC); and special techniques such as immunochemistry for the analysis and structure elucidation of drugs.

PHA2210

Dosage Form Science III

3 U; 1 Lect. 0.5 Tut. 2 Prac.; 1st term

Examines the formulation of medicines and how this influences bioavailability. Particular topics include powder technology, tablet and capsule manufacturing; sustained and controlled-release preparations; target drug delivery, other advanced drug delivery systems and basic concept of good manufacturing practice (GMP).

PHA2220

Biopharmaceutics and Pharmacokinetics

2 U; 2 Lect. 1 Prac.; 2nd term

Provides a review of drug absorption, distribution, metabolism and excretion (ADME) in the human body. Factors which influence ADME such as physical/chemical properties of drugs, route of drug administration, pathophysiology, organ function and genetic variation will also be discussed. The main emphasis of the course is on the mathematical description of the events which transpire following drug administration and how these may affect drug therapy.

PHA2310

Pharmacy Practice I

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 2nd term

Introduces the concept of drug use control; the role of the pharmacist in different practice environments; interpretation and evaluation of different types of prescription; observation of legal requirements in dispensing, record keeping and storage of drugs; patient counselling techniques; provision of drug information to health professionals; consideration of contemporary issues such as medication compliance and drug misadventures, including adverse drug reactions and medication errors.

PHA2320

Pharmacy Law

2 U; 2 Lect. 1 Tut.; 1st term

Provides students with a working knowledge and the application of laws and regulations affecting pharmacy practice in Hong Kong.

PHA2411, 2412

PHA3411, 3412

Pharmacology and Therapeutics I, II

Pharmacology and Therapeutics III, IV

3 U each; 2 Lect. 0.5 Tut. 0.5 Prac.; 2nd Year 1st, 2nd term

3 U each; 2 Lect. 1 Tut.; 3rd Year 1st, 2nd term

Provides students with an understanding of the principles of drug action including pharmacodynamics and pharmacokinetics. The pharmacotherapy of disorders associated with various organ systems are discussed in a modular system over four terms. In each

module, the general pathology together with the clinical features, diagnostic and monitoring parameters of the therapy are to be introduced. The course will provide the students an understanding of mechanisms of action, pharmacological effects, clinical indications and relevant side effects of the most important drugs used. The modules of diseases/drugs covered include central nervous system, cardiovascular system, respiratory system, gastrointestinal system, immunological system, endocrine system, chemotherapy and others. Pharmacoeconomic analysis and its role in pharmacotherapy will also be discussed.

PHA2510

Pharmacognosy I

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 2nd term

Introduces students to the use of plants in pharmacy and medicine; plant taxonomy; botanical and chemical aspects of plant drugs; quality control of crude drugs; sources, chemistry and uses of some chemical substances from plants including alkaloids, glycosides, terpenoids, carbohydrates, fixed and volatile oils.

PHA2710

Pharmaceutical Research Methods and Techniques

2 U; 2 Lect. 2 Prac.; 1st term

Provides students with an understanding of the principles and methods of pharmaceutical research in pharmaceutical sciences and pharmacy practice. The use of qualitative and quantitative research methods; research design; statistical analysis of different types of data; application of computer software for data analysis and application to research and practice will be included.

PHA3310

Pharmacy Practice II

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 1st term

Examines the professional and social interactions between pharmacists, doctors, patients and the general public; consideration of ethical principles and theories in relation to pharmacy practice; differential recognition and prescribing of over-the-counter (OTC) products for common minor ailments; health promotion; patient education on contraceptives, smoking cessation, nutritional and home testing products; examination of the role of the pharmacist in combating drug abuse.

PHA3510

Pharmacognosy II

3 U; 2 Lect. 0.5 Tut. 2 Prac.; 1st term

Introduces students to the discovery of new drugs from natural sources; particularly antidiabetic, anticancer, antibacterial, antiviral and antiprotozoal agents. The different types of alternative medicine including herbal medicine, traditional Chinese medicine, homoeopathy and aromatherapy. Crude drugs of current commercial interest such as St. John's Wort.

PHA3611, 3612

Pharmacy Clerkship/Project I, II

3, 9 U; 3, 9 Prac.; 1st, 2nd term

This course consists of two components, namely pharmacy clerkship experience, and an assigned project based on either research or literature review in pharmaceutical sciences or pharmacy practice. A minimum of three weeks of clerkship is required for all students. Beyond that, the students have the choice of additional clerkship experience or research project according to individual student's preference.

The required clerkship is in the hospital, community and industrial settings. During clinical and community clerkships, the emphasis is on selected patient-focused pharmacy practice. Activities include ward rounding, communication with other healthcare professionals, provision of drug information to patients and other health care providers, participation in the choice, dosing and monitoring of drugs for individual patients to optimize efficacy, safety and cost-effectiveness. The research project can be in any disciplines in pharmaceutical sciences, e.g., medicinal chemistry, physical pharmacy, pharmacokinetics, pharmacology, pharmacognosy/pharmaceutical analysis, or pharmacy practice.

Study Scheme

1. Major Programme

Students are required to take and pass 63 units of required courses (including 12 units of Pharmacy Clerkship/Project I and II) and take 12 units of Major Elective/Prerequisite courses in which 5 units must be passed for graduation. In total, a minimum of 68 units of courses must be passed before graduation.

For S7 Entrants

First Year of Attendance

PHA1000, 1110, 1211, 1212, 1311, 1312, 1421[®], 1422[®], 1431[®], 1432[®], 1440

Second Year of Attendance

PHA2110, 2130, 2210, 2220, 2310, 2320, 2411, 2412, 2510, 2710[®]

Third Year of Attendance

PHA3310, 3411, 3412, 3510, 3611, 3612

For S6 Entrants

First Year of Attendance

PHA1000, 1110, 1440

Second Year of Attendance

PHA1211, 1212, 1311, 1312, 1421[®], 1422[®], 1431[®], 1432[®]

Third Year of Attendance

PHA2110, 2130, 2210, 2220, 2310, 2320, 2411, 2412, 2510, 2710[®]

Fourth Year of Attendance

PHA3310, 3411, 3412, 3510, 3611, 3612

2. Faculty Language Requirement

3. Major/Faculty Requirement for S6 Entrants

All S6 or equivalent students admitted in 2004-05 and thereafter are required to complete 9 units of Major courses at 1000 and above level from the following areas preferably in their first year of attendance.

- | | |
|-----------|---|
| 4-6 units | any science courses offered by the Faculty of Science in the following subject areas : Biochemistry, Biology, Chemistry, Food and Nutritional Sciences, Mathematics, Physics, Statistics or BCM1104 or 1205; |
| 3-5 units | any accounting/social science/humanities courses offered by the Faculty of Arts/Business Administration/Social Science in the following subject areas: Anthropology, Economics, Philosophy, Professional Accountancy, Psychology and Sociology. |

[®] Major Elective/Prerequisite courses.

The combination from above should add up to a total of 9 units.

For course selection, priority must be given to B.Pharm. Major courses and Major Elective/ Prerequisite courses in case of timetable clash.

Public Health

Course List

<i>Code</i>	<i>Course Title</i>	<i>Unit</i>
PBH1001	Foundations in Public Health	2
PBH1002	Basic Epidemiology and Biostatistics	3
PBH1003	Social Determinants of Health; Nutrition and Health; Promoting Health and Healthy Behaviours	3
PBH1004	Human Health and Disease	1
PBH1005	Health and the Environment	1
PBH1006	Work and Health	1
PBH1007	Introduction to Health Services and Management	1
PBH1008	Elective	3

Course Description

PBH1001

Foundations in Public Health

2 U

This introductory course intends to introduce to undergraduate students the core domains and foundation concepts in public health. Topics include the history of public health and the development of health services, three core domains of public health practice, core disciplines, current trends and issues in the field of public health. International issues and comparisons will also be studied.

PBH1002

Basic Epidemiology and Biostatistics

3 U

This course introduces the basic principles and methods in epidemiology and provides an overview of basic statistical methods used to describe and interpret data. Topics include study designs and research methods.

PBH1003

Social Determinants of Health; Nutrition and Health;

Promoting Health and Healthy Behaviours

3 U

This course provides an overview of the relationship between health, social factors and behaviour from an ecological perspective including the relevance of socioeconomic status on health and health inequalities. It will introduce concepts of primary, secondary and tertiary prevention in a variety of settings. There will be specific focus on nutrition and the challenges of obesity and non communicable diseases. The basic principles in health promotion and education will also be covered.

PBH1004

Human Health and Disease

1 U

The course covers the basics of human biology, including anatomy and physiology, major health problems and different disease models including the interactions of host-agent-environment in disease causation.

PBH1005

Health and the Environment

1 U

This course provides an overview of environmental issues that humans are facing in today's world. Various aspects of environmental health will be explored, including air quality, water contamination, food safety, radiation, hazards, injuries, global climate change.

PBH1006

Work and Health

1 U

The relationship between work and health, including basics of occupational health, are covered in this course.

PBH1007

Introduction to Health Services and Management

1 U

This course provides an introduction to health care needs, health care systems and policies, health care delivery and financing, and different modes of healthcare.

PBH1008

Elective

3 U

Elective includes further studies within a selected area in public health. Students will be required to choose one of the following topics in Public Health, conduct a literature review, collect relevant information and data which may involve field work and, under the supervision of a teacher, submit a report on the chosen topic.

- infectious diseases
- health education and promotion
- public health law and ethics
- global health challenges
- health issues of special populations
- health service management

Study Scheme

Minor Programme

Students are required to complete a minimum of 15 units of courses as follows:

PBH1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008

- Notes:
1. Students are required to enroll PBH1001 and 1004 in the same term as the assessment of PBH1001 and 1004 will be conducted together.
 2. Students are required to complete PBH1001 and 1004 before enrolling other courses.
 3. Students may apply for course exemption if they have taken similar courses in their Major or Minor programme, subject to the approval of the School of Public Health/Department of Community and Family Medicine, and should take the same units of other course(s) as specified in place of the exempted course(s).