REGULATIONS FOR THE DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (MBBS)

(See also General Regulations)

M 1 A candidate for admission to courses in the Faculty of Medicine must adduce evidence satisfactory to the Board of the Faculty of Medicine of his ability to understand and profit from the course he proposes to follow.

- M 2 To be eligible for admission to the degrees of Bachelor of Medicine and Bachelor of Surgery, a candidate shall
 - (a) comply with the General Regulations; and
 - (b) complete the curriculum and satisfy the examiners in the First, Second, Third and Final Examinations.
- **M 3** The curriculum shall extend over ten academic semesters and such intervening vacations as may be prescribed, and shall include four examinations, the First, Second, Third and Final Examinations, each held annually, and other class tests as prescribed in the regulations set out below.
- M 4 To complete the first year of the curriculum, a candidate shall
 - (a) follow instruction in the Introduction to Health and Disease Block and the integrated systems based course covering the respiratory system, cardiovascular system and gastrointestinal system; and
 - (b) satisfy the examiners at the First Examination, by producing evidence of satisfactory participation and performance in tutorials and clinical skills sessions and by satisfactory completion of written and practical examinations comprising the themes of biological, behavioural, population and clinical sciences. The First Examination shall be held annually in May of the first year of the curriculum and its supplementary examination in July/August of the same year.
- M 5 To complete the second year of the curriculum, a candidate shall
 - (a) follow instruction in six units of the integrated system-based course covering the urogenital system, musculoskeletal system, central nervous system, head and neck system, haematology and immunology system, and endocrine system; and
 - (b) satisfy the examiners at the Second Examination, by producing evidence of satisfactory participation and performance in tutorials, clinical skills and clinical interpersonal skills sessions, and by satisfactory completion of written and practical examinations comprising the themes of biological, behavioural, population and clinical sciences. The Second Examination shall be held annually in May of the second year of the curriculum and its supplementary examination in July/August of the same year.
- M 6 To complete the third year of the curriculum, a candidate shall
 - (a) follow instruction in the Integrated Block and a Clinical Clerkship Course covering the common clinical problems; and

- (b) satisfy the examiners at the Third Examination, by producing evidence of satisfactory participation and performance in tutorials and clinical sessions, and by satisfactory completion of written and practical examinations comprising the themes of biological, behavioural, population and clinical sciences. The Third Examination shall be held annually in May of the third year of the curriculum and its supplementary examination in June/July of the same year.
- M 7 To complete the fourth and fifth years of the curriculum, a candidate shall
 - (a) follow instruction in a range of clinical disciplines, both hospital- and community-based;
 - (b) complete in a satisfactory manner such class tests as may be prescribed by departments or units contributing to the teaching included in the curriculum, and the special study module to be undertaken after the Final Examination; and
 - (c) satisfy the examiners at the Final Examination, by producing evidence of satisfactory participation and performance in tutorials and clinical sessions, and by satisfactory completion of written and practical examinations comprising the themes of biological, behavioural, population and clinical sciences. The Final Examination shall be held in February/March/April in the final year of the curriculum and its supplementary examination in June and/or November/December of the same year.
- **M 8** A candidate who is unable because of illness to be present for any paper or papers of any subject or subjects of an examination may apply for permission to present himself at the next subsequent examination in the appropriate paper or papers. Any such application shall be made on the form prescribed within two weeks of the first day of the candidate's absence from any examination.

M9

- (a) Before he may present himself for examination, a candidate shall complete the courses of study and instruction leading to the examination and shall achieve a satisfactory standard in the tutorials and class work prescribed in the syllabuses.
- (b) If a candidate fails to satisfy the examiners at the First, Second, Third or Final Examination, the Board of Examiners will determine the need for, and the nature of, a remedial period followed by re-examination. In certain circumstances, the Board may recommend repeat of the year or discontinuation of studies.
- (c) If the candidate fails re-examination after a remedial period, the Board of Examiners may recommend repeat of the year or discontinuation of studies.
- (d) If, after repeating a year, the candidate fails to satisfy the Examiners, the Board of Examiners may recommend discontinuation of studies.

M 10 In connection to M9 (b), (c) and (d), the examiners may take into consideration written or practical work required of candidates during the course of study and practice, participation in tutorials and the results of class tests.

M 11 Before being admitted to the Final Examination, a candidate shall

- (a) undertake such clinical clerk appointments as are prescribed from time to time by the Board of the Faculty of Medicine;
- (b) reside, while undertaking clerkship appointments, at the Residence for Medical Students or in a designated teaching hospital, for such periods as are specified from time to time by the Board of the Faculty of Medicine; and
- (c) provide evidence that he will have reached his twenty-first year of age by June 30 of the calendar year in which he presents himself for the Final Examination.

M 12 To complete the whole curriculum, a candidate shall, apart from following the above regulations, complete satisfactorily at least three full special study modules or equivalent, of which one must be undertaken after the Final Examination, throughout the period of study.

M 13 The degrees of M.B.,B.S. may be awarded with Honours but a candidate shall not be eligible for Honours if he has presented himself more than once in any part of the Final Examination.

SYLLABUSES FOR THE DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY

FIRST AND SECOND YEARS

The first and second years of the course is an integrated curriculum which covers anatomy, biochemistry, physiology, health, behaviour and medical care, an introduction to biostatistics, pharmacology, principles of microbiology and applied microbiology, principles of immunology, pathology and systemic pathology and an introduction to medicine and surgery. The first part of the first year is the Introduction to Health and Disease Course. The System-based Course begins in the second semester of the first year and continues for the first and second semesters of the second year.

Attendance at tutorials is compulsory and participation in tutorial sessions forms part of the assessment in the first and second years of the course. A satisfactory standard of performance must be attained in tutorials, class tests and coursework generally for admission to the degree examinations.

Students are required to attend a four-week special study module at the end of both the first and second years related to aspects of basic science, community or hospital based health care, or on non-medical areas of interest, or undertake remedial study if they have failed to satisfy the examiners in the first and second examinations.

COURSE CONTENT

The first and second years of the medical curriculum comprise small group sessions, lectures, laboratory sessions and demonstrations, clinical and clinical interpersonal skills sessions, community and hospital visits. The small group sessions, clinical and clinical interpersonal skills sessions and clinical visits are conducted on a faculty organised basis, whilst lectures and laboratory sessions are conducted by the relevant departments.

MBBS 1001 Introduction to Health and Disease

The Introduction to Health and Disease block is to provide an introductory overview of the structure and function of the human being, based around the theme of a "hierarchy of systems". Through the use of clinical case problems, students will explore the hierarchy of systems from molecules, cells, tissues, organs and major body systems to the patient as an individual, and as a member of a family and a community. They will examine the interaction between the different levels in the system, and so take a holistic view of human biology. The block also covers an overview of processes of disease, that is, the principle on how the physical, chemical and biological agents act at the tissue to molecular level to produce pathological processes such as inflammation, degeneration, neoplasia, autoimmunity, and gene malfunction which are final common pathways of cell damage or malfunction. It also gives the introduction of therapeutic strategies for modulating disease processes.

System-based Course

The second semester of the first year and the two semesters of the second year is a system-based course concerning with the structure and function of the organ systems of the body in the context of the patient as an individual and as a member of a wider population group. Students are expected to acquire a fundamental understanding of body systems in health and disease. The organ systems covered during these three semesters are respiratory, cardiovascular, gastrointestinal, urogenital, musculoskeletal, central nervous, head and neck, haematology /immunology, and endocrine.

MBBS1003 Cardiovascular system

The objectives are to provide a basic understanding of the structure and function of the components of the cardiovascular system as well as the key concepts and terminology in anatomy, behavioural science, biochemistry, community medicine, microbiology, pathology, pharmacology and physiology that are relevant to the cardiovascular system; to introduce common disease processes that affect the cardiovascular system; to ensure that an understanding of biological functions also takes into account ideas of the individual as a person, as a member of a family, and as a part of the greater community; to provide a basic understanding of the role of the doctor, the functions of the health care system in Hong Kong, and the relevance of medical ethics and economics to the practice of medicine; and to provide a supportive climate to students for the process of professional development.

MBBS1004 Respiratory system

The objectives are to provide a solid understanding and knowledge of the structure and function of the respiratory system as well as the mechanisms of common respiratory disease states and their treatment; to enable students to become aware of the public health issues e.g. cigarette smoking, environmental pollution, primary health care, disease prevention, as they relate to the respiratory system; and to cultivate and foster the professional development of students to become doctors responsive to the needs of the community as well as the individual patient.

MBBS1005 Gastrointestinal system

The objectives are to provide a basic understanding of the structure and function of the constituents of the gastrointestinal system as well as the key concepts and terminology in anatomy, physiology, biochemistry, pharmacology, behavioural science, community medicine, microbiology, pathology and radiology that are relevant to the gastrointestinal system; to introduce common disease processes and the public health care aspects of diseases that affect the gastrointestinal system; and to continue providing a basic understanding of the role of the doctor, the functions of the health care system in Hong Kong, and the relevance of medical ethics and economics to the practice of medicine.

MBBS2002 Urogenital system

The objectives are to provide a basic understanding of the structure and function of the urogenital system as well as the important concepts in anatomy, physiology, biochemistry, community medicine, microbiology, pathology, pharmacology that are relevant to urogenital system; to enable the students to understand the mechanisms of common disease processes that affects the urogenital system and the socio-psychological aspects of the diseases; to facilitate the professional development of students to become doctor responsive to such needs; and to allow a basic understanding of the role of the doctor, the functions of the health care system in Hong Kong, and relevance of medical ethics and economics to the practice of medicine.

MBBS2003 Endocrine system

The objectives are to provide an overview of the physiological control of hormonal secretion; to provide a basic understanding of the structure and function of the endocrine glands; to introduce the mechanisms of action of various endocrine hormones; to enhance students' awareness in modification of life style issues in the prevention of endocrine diseases and to enable students to appreciate the cost-effectiveness of disease treatment; and to enhance the professional development of students to become future doctors.

MBBS2004 Haematology and immunology

The objectives are to provide an understanding of the structure, components and function of the haemopoietic system and immune system; to provide an overview of the key concepts and terminology in anatomy, physiology, biochemistry, pharmacology, community medicine, microbiology and pathology that are relevant to the field of haematology and immunology; to introduce common disease processes in the field of haematology and immunology; to facilitate an understanding of the socio-psychological impact of haematological and immunological disorders on the patient, the family and the community; and to provide, as a continuation of the previous modules, a basic understanding of the role of the doctor, the functions of the health care system in Hong Kong, and relevance of medical ethics and economics to the practice of medicine.

MBBS2005 Musculoskeletal system

The objectives are to provide a basic understanding of the structure and function of the musculoskeletal system; to provide a basic understanding of the anatomy, biochemistry and physiology of the different components of the musculoskeletal system, namely bones, joints, and skeletal muscles and their nerve supply; to provide a basic concept of common pathological processes which may affect the musculoskeletal system; to introduce common disease processes seen in musculoskeletal system; to provide a basic understanding of the physiology and drug treatment of pain; to provide knowledge of the epidemiology and the understanding of the social impact of common musculoskeletal disorders; and to introduce basic clinical skills involved in the examination of patients with musculoskeletal disorders.

MBBS2006 Central nervous system

The objectives are to provide a basic understanding of the structure and function of the central nervous system as well as the anatomy and physiology of the brain, spinal cord, sensory and motor systems, and the biochemical aspects of neurotransmission; to appreciate pathological processes that involve the CNS and the molecular basis of neurological disorders; to understand the basis of drug treatments and the principles of rehabilitation medicine in relation to the diseases; and to learn the basic clinical skills involved in the examination of patients with neurological disorders.

MBBS2007 Head and neck system

The objectives are to provide a basic understanding of the structure and function of the head and neck system as well as relevant concepts in anatomy, physiology, biochemistry, community medicine, pharmacology, and pathology; to enable the students to understand the mechanisms of common disease processes that affect the head and neck system; to provide knowledge of the epidemiology and basic understanding of the socio-psychological aspects of the diseases and to facilitate the professional development of students to become doctor responsive to such needs; and to continue providing an understanding of the role of the doctor, the functions of the health care system in Hong Kong and the relevance of medical ethics and economics to the practice of medicine.

Clinical and clinical interpersonal skills

In the first and second years of the curriculum, students are expected to develop basic clinical and clinical interpersonal skills appropriate to the organ systems studied as well as to the patient as an individual. Students develop these skills in a clinical laboratory setting and eventually apply these skills in a clinical setting. They are required to attend clinical sessions in community and hospital visits, and to apply the skills developed in the laboratory setting to the management of patients.

ASSESSMENT

Assessment of students is centralized and comprises formative as well as summative elements. A formative assessment will be held at the end of the first semester of the first year, but the results will not contribute to the summative assessment (First Examination) which will be held at the end of the second semester of the first year. The summative assessment comprises tutorial performance assessment, written papers and an objective structured clinical assessment (OSCA) at the end of the first year. Written papers include materials from the anatomy, physiology, biochemistry, pharmacology, community medicine, pathology, microbiology, and other clinical disciplines. Students who fail to satisfy the examiners shall be required to complete remedial study at the end of the first year and to take the supplementary examination. Summative assessment in the second year (Second Examination) follows the same format as that in the first year.

Distinction may be awarded on the basis of performance in continuous assessment, knowledge-based assessment and OSCA.

THIRD YEAR

The third year of the course comprises the integrated block and the junior clerkship. Students are also required to attend a four-week special study module at the end of the third year. Those who have failed to satisfy the examiners in the third examination are required to undertake remedial study.

COURSE CONTENT

Integrated block

MBBS3001 Integrated block

The first eight weeks of the first semester of third year is an integrated block. The knowledge and skills learnt by the students in the first two years of the curriculum will be reinforced. A "life cycle" approach is adopted, during which students are expected to learn common clinical problems in a multidisciplinary manner. A co-ordinated course on essential clinical skills is also conducted.

During the integrated block, students will acquire a preliminary understanding of the interdisciplinary nature of the study of human sexuality and its relationship to the rest of medicine. There will be contributions from psychiatry, social sciences, medicine, psychology and other fields.

Students are also required to start working in small groups to conduct a multidisciplinary research project. The findings of the projects are presented and subject to peer assessment at the beginning of the fourth year. Project reports are submitted in the form of a medical journal article.

There is also a multidisciplinary integrated teaching programme on tuberculosis in the integrated block.

Junior Clerkship

This clinical course commences in the middle of the first semester and lasts for a total of twenty-seven weeks. Emphasis is on the diagnosis of common clinical problems with regular revisiting of the preclinical sciences and the themes of biological, behavioural, population and clinical sciences. The course consists of three blocks of clinical clerkships of nine weeks each in rotation, namely the medicine-related block, the surgery-related block and the multidisciplinary block on cancer and infection. There are small group tutorials, lectures, bedside and outpatient teaching, and clinicopathological conferences.

MBBS3002 Medicine related block

This teaching block introduces the students to the taking of complete medical, social, personal and family history and the performance of a complete physical examination in a patient with a medical complaint. The principles and practice of medicine are covered, including presentation of findings and understanding of common presenting clinical features of medical illnesses and their correlation with the underlying pathophysiological changes. Students will also learn how to integrate the history and physical signs of the clinical problem in order to arrive at a clinical diagnosis or an appropriate list of differential diagnosis, and to select critically a set of useful and appropriate investigations to help confirming the clinical diagnosis. Pre-clinical sciences will be revisited.

MBBS3003 Surgery related block

This teaching block introduces the students to the diagnosis of common surgical problems. Students will be exposed to the management of ambulatory surgical patients from primary to postoperative community care, observe and understand the management of patients with surgical emergencies and comprehend the role of basic investigations in surgical practice. They will revisit and practice the communication and clinical skills at bedside with system-based approach. Pre-clinical sciences will be revisited.

MBBS3004 Multi-disciplinary block: cancer and infection

This teaching block introduces the students to the clinical approach to symptoms and signs of cancer and infective diseases, as well as the basic of simple investigations and public health approaches. There is also an introduction to clinical approach to special clinical situations including ENT, emergency medicine, community-medicine, obstetrics and gynaecology, paediatrics and orthopaedic surgery. This is to complement teachings in the Medicine-related and Surgery-related blocks so as to allow a holistic and balanced approach to patients. There is further teaching on essential clinical skills and application of imaging in clinical settings. Students will revisit head and neck anatomy with reference to common clinical situations. Reference will be made to the other aspects of basic sciences covered in the first two years to demonstrate their importance and applications in clinical settings.

ASSESSMENT

Continuous clinical competence assessment is carried out throughout the third year based on students' performance in bedside, outpatient and other small group learning sessions, including PBL tutorials, and logbook validation. The results of the assessment will be taken into account for progression to the fourth year. At the end of the third year, there is a summative written assessment (Third Examination) and a clinical examination for students whose performance in the continuous clinical competence assessment has been identified as unsatisfactory.

FOURTH AND FINAL YEARS

During the fourth and fifth years of the course, students will undertake further learning in a variety of clinical disciplines including medicine, surgery, obstetrics and gynaecology, orthopaedic surgery, paediatrics, psychiatry and family medicine. There is also integrated teachings on primary care and medical ethics and law. Students will be given the opportunities to expose to Chinese Medicine as well as private practice. Clinical and clinical interpersonal skills will be reinforced. Students will be required to attend a four to six week special study module at the end of the fifth year after the Final Examination.

Senior Clerkship

This clinical course takes up the first semester of the fourth year lasting for a total of twenty-four weeks. It emphasises on differential diagnoses, further investigations and therapeutic management of common clinical problems. Students will be exposed to acute and emergency medicine as well as rehabilitation medicine with regular revisiting of pre-clinical sciences and community medicine. The course consists of three blocks of clinical clerkships of eight weeks each in rotation, namely the general medicine block, the surgery and orthopaedic surgery block and the multidisciplinary block on emergency, palliative care and rehabilitation.

MBBS4001 General medicine block

This teaching block builds on what the students have leant in the medicine-related block in Junior Clerkship more sophisticated clinical approach and skills. It covers the principles of holistic management and prevention of common and/or important medical diseases and issues related to clinical therapeutics. There is emphasis on genetic aspects of diseases, common dermatoses, cutaneous manifestations of systemic diseases, geriatric problems, as well as the selection and interpretation of investigations and the principles of management. Pre-clinical sciences will be revisited.

MBBS4002 Surgery and orthopaedic surgery block

This teaching block allows students to revisit and practise the clinical and communication skills acquired in the Junior Clerkship. It helps extending further knowledge of surgical practices on the basis of the core principles acquired and gives students the opportunities to observe and experience in the network hospitals the practice of surgery, diagnostic and therapeutic endoscopic procedures, and surgical procedures in operation theatres. Pre-clinical sciences will be revisited.

MBBS4003 Multi-disciplinary block: emergency, palliative care and rehabilitation

This teaching block emphasises on emergency, palliative care and rehabilitation medicine. It covers areas like environmental emergencies, anaesthesiology and intensive care, advanced life support, emergency in obstetrics and gynaecology, management of cancer and oncological emergencies, diagnostic radiology, palliative oncology, general rehabilitation, perinatology with neurohabilitation, pathogenesis of acute diseases and use of laboratory in emergence care. Pre-clinical sciences and community medicine will be revisited by means of seminars on aging.

Specialty Clerkship

This clinical course takes up the second semester of the fourth year and the first semester of the fifth year and last for a total of forty-eight weeks. It is a stage of apprenticeship with in-depth exposure to different specialties in clinical setting. The course consists of six blocks of clinical clerkships of eight weeks each in rotation, and a primary care block spreading throughout the whole period of clerkship. Satisfactory attendance at the tutorials, seminars, bed-side and outpatient teaching and other small group clinical teachings are essential. Students may be required to reside in the Residence for Medical Students. They will learn the finer details of clinical care by participating in the day to day management of patients.

MBBS4011/MBBS5011 Family Medicine

The block covers the content and process of family medicine in Hong Kong with emphasis on family medicine concepts and principles including doctor-patient communication. Preventive medicine, infectious diseases and health education are among other topics covered. There is also a short one-to-one attachment to family physicians in the community. At the end of the clerkship, students should be able to recognise the importance and inter-relationship of pyschosocial and physical factors in health and diseases, use time, diagnostic and therapeutic resources and specialist services cost-effectively, and adopt a more patient-centred approach in diagnosis and management of illness.

MBBS4012/MBBS5012 Medicine

The block covers disease pathophysiology of all sub-specialties of Medicine and their interrelationship, including dermatology, infectious diseases and geriatrics; social and psychological aspects of medical diseases; clinical pharmacology and therapeutics, knowledge of the indications, limitations and cost-effectiveness of various treatment modalities in Medicine including ambulatory medical care. At the end of the block, students should be able to elicit and present relevant clinical findings succinctly and have acquired under supervision as assistant interns basic technical skills in venesection, setting up an intravenous drip, ECG examination and cardiopulmonary resuscitation.

MBBS4013/MBBS5013 Obstetrics and Gynaecology

At the end of the block, students should be equipped with knowledge and skill to participate in women health care including fertility regulation, prevention and early detection of diseases by screening, be aware of the effect of disorders of the female genital tract, and of pregnancy, delivery and puerperium on health in women, be able to understand the patient-centred care for obstetric and gynaecological disorders and respect patient's rights, privacy and confidentiality.

MBBS4014/MBBS5014 Orthopaedic Surgery

At the end of the block, students should be able to take a complete history and perform complete and proper physical examination in a patient with musculoskeletal disorder; integrate the history and physical signs to arrive at an appropriate list of differential diagnoses, and to plan subsequent investigation; and comprehend the presentations and the principles of management of common orthopaedic conditions.

MBBS4015/MBBS5015 Paediatrics

At the end of the block, students should be able to recognize when a child is ill; demonstrate the skills of obtaining history from parent and child; adapt clinical examination skills to the needs of the child; be able to communicate and discuss the patient's problems with peers, patients and parents; appreciate the difference between the child and adult patient; recognize the importance of nutrition, growth and development in childhood and adolescence; relate clinical problems with basic sciences (especially genetics and embryology), analyse the role of the family, society and environment; identify clinical problems and formulate a management strategy for the child; and acknowledge the importance of special issues such as child health in terms of injury prevention, breast-feeding, children with multiple disabilities/handicap; and dying child.

MBBS4016/MBBS5016 Primary Care

The block comprises sessions on Chinese Medicine, advanced clinical interpersonal skills, medical ethics and law and attachments to primary/ambulatory care setting in various specialties. Student will learn about the role of primary care in the delivery of health care to the population, the presentation and management of the most common problems related to different specialties, the appropriate and cost-effective use of specialist and hospital resources, and the skills of ambulatory care. There will be discussion of ethical issues and medical dilemmas. Elementary topics on Chinese Medicine will also be covered.

MBBS4017/MBBS5017 Psychiatry

The block covers basic notions in psychiatry, the principles of diagnosis, evaluation, problem identification, management of common psychiatric problems and emergencies, and proper use of psychiatric treatment in general practice setting. Students will also learn about the influence of psychosocial factors on health seeking behaviour and the course of illness and the way in which doctors' own emotional response to patients can influence clinical judgement and patient management.

MBBS4018/MBBS5018 Surgery

The block includes instructions in general surgery and clinical rotations among surgical sub-specialties at Queen Mary Hospital. Students will learn inpatient and outpatient management of common elective and emergency surgical problems, including those seen in primary care setting, as well as the selection and interpretation of appropriate investigations and treatment options. Teaching will include tutorials, ward round, outpatient clinic visits, departmental academic meetings, attendance of operative and endoscopic sessions, and attachment to Accident and Emergency Department.

Revision

In the month of January, a series of revision sessions will be held to help students preparing for the Final Examination.

Pre-Internship Block

It is a two-week block offered in June with the objective of preparing graduates for a smooth transition to internship programme. Students will undertake structured practical tips, orientation workshops and a period of assistant internship just before they begin their internship at various hospitals in Hong Kong.

ASSESSMENT

Continuous clinical competence assessment is carried out throughout the Senior Clerkship based on students' performance in bedside, outpatient and other small group learning sessions, and logbook validation. The results of the assessment will be taken into account in the Final Summative Assessment in the fifth year. There is no written summative assessment at the end of the Senior Clerkship.

During the Specialty Clerkship, continuous assessment and clinical competency test will be held at each rotation. Satisfactory performance is required for eligibility to sit for the Final Examination, which will be held at the end of fifth year before the Special Study Module.