

Imperial College London

School of Medicine

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Undergraduate Syllabuses_2005–06

This publication refers to the session 2005–06. The information given, including that relating to the availability of courses, is that current at the time of going to press, October 2005, and is subject to alteration.

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School of Medicine

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The School of Medicine provides an integrated course of instruction leading to the degrees of Bachelor of Medicine and Bachelor of Surgery (MBBS), as well as the Bachelor of Science (BSc) of the University of London. In addition, the School offers direct entry into the third year of the course to students who have successfully completed their 'pre-clinical' training at other universities to enable them to complete the MBBS and courses for students of medicine at other universities who wish to take an intercalated Bachelor of Science (BSc) degree.

This syllabus relates to the revised course, which applies to students who started the course in or after 2004–05. Students who began their course before this should refer to their *Year Guides* for detailed syllabus information and/or previous syllabuses.

Details of postgraduate opportunities can be found in the online *Postgraduate Prospectus* at www.imperial.ac.uk/pgprospectus.

The MBBS/BSc course

The MBBS/BSc course is an integrated course extending over six years. The core course comprises four elements:

Scientific basis of medicine: explores the principles underlying normal human organisation and function from molecular to social levels.

Doctor and patient: problem-based learning (PBL) tutorials where students develop important skills in defining the objectives of a task, and working as a team to produce and present their findings; communication skills; personal and professional management.

Clinical experience: patient contact course; medical and surgical attachments; specialty rotations and final year revision block, specialty choice modules, accident and emergency; general practice; professional work experience and elective.

Modular BSc Honours degree: the modular science degree programme comprises a six-week Science Foundation course in the third year and the science year (fourth year).

First and second years

The first week provides an introduction and orientation to the undergraduate medical course and to the School of Medicine. This includes study skills and information technology sessions in addition to introductory sessions in the scientific basis of medicine and clinical practice.

Students then follow an integrated course comprising the three main elements of the core course: scientific basis of medicine; doctor and patient; and clinical experience.

Over the first and second years, the course is organised into the following themes:

Molecules, cells and disease includes molecular and cell biology, genetics, blood and blood-forming tissues, metabolism, infection, immunity, cell pathology, carcinogenesis and cancer as a disease.

Life support systems includes the skin, cardiovascular, respiratory, alimentary and urinary systems, and the anatomy of the thorax, abdomen, pelvis and perineum.

Life cycle and regulatory systems includes reproduction and development, neuroscience and psychology, the endocrine and musculoskeletal systems, the anatomy of the head, neck, spine and limbs, and pharmacology and therapeutics.

Foundations of clinical practice includes communication skills, sociology, ethics and law, evidence-based medicine and information technology. The first year element of clinical experience (the patient contact course) is also managed as part of this theme.

Integrated body function and dysfunction includes modules on water and electrolytes, sepsis, exercise, drugs, and the hospitalised patient and nutrition. Teaching comprises lectures, clinical demonstrations, tutorials, seminars, computer workshops, laboratory practical and clinical skills classes.

Clinical experience

Clinical experience in the first year is provided by the patient contact course. On average, one half-day session each week is spent working, under the supervision of a team of general practitioners or clinicians, through three patient projects: illness, health and disease; living with a diagnosis; and the experience of healthcare.

In the second year there is a four-week introductory clinical attachment. The main objective of this attachment, which may be at any of the hospitals associated with the School, is to enable students to become much more familiar with talking to patients and taking histories in more detail, and to accustom themselves to as many aspects of hospital life and procedures as possible .

Third year

This year consists predominantly of medical/surgical attachments, which may be at any of the hospitals associated with the school. The system and topics continue to be delivered via a lecture programme alongside the clinical attachments and PBL cases will be studied within attachments. The emphasis throughout will be on the acquisition of core skills and knowledge in general medicine (including cardiovascular, renal, respiratory and cancer medicine, gastroenterology, endocrinology, medicine for the elderly), general surgery (including gastrointestinal, breast and vascular surgery, urology), anaesthetics, clinical pharmacology and therapeutics. Core learning is based on:

Medical or surgical takes.

GP teaching: basic clinical skills/methods in general practice.

Patient clerking: to clerk (take the history and examine) at least two patients each week and writing up these case histories. Students are assessed on two of these written clerkings each firm, separate from the case project.

Consultant teaching: key cases relating to the firm—students will be expected to present patients during these sessions and this forms part of the assessment.

Problem-based learning.

Lecture course: a continuation of systems and topics.

Other teaching: this will depend on the nature of the clinical programme of your attachment, but should include: outpatient clinic teaching, theatre sessions, endoscopy sessions, anaesthetic sessions.

Reading.

Modular BSc degree: there is a six-week introductory course early in the third year, which will provide an introduction to the specific BSc course selected by the student.

Fourth year (BSc)

Modular BSc degree: students undertake a series of eight three-week modules in an area of particular scientific interest leading to a named BSc (see below); five taught modules are taken in the autumn term and early spring term, followed by a three-module supervised research project or a further three taught modules.

Intercalated BSc courses: students from other UK medical schools may study for an intercalated BSc by joining the science year and following the same modules as Imperial College medical students. In order to be eligible students must have completed the equivalent of at least two years of basic medical science, meet the eligibility requirements to undertake the intercalated BSc (or its equivalent) at their own university medical school, and have a guaranteed place to continue their medical studies at their own university on completion of the year. Further details can be found in the *Guide to Intercalated BSc Courses* available from the Undergraduate Medicine Office.

Courses/title of award: BSc Medical Sciences with
Cardiovascular Sciences
Endocrinology
Gastroenterology and Hepatology

Haematology
 Imaging
 Immunobiology and Pathology
 Management
 Molecular Basis of Disease
 Neuroscience
 Obstetrics and Gynaecology
 Paediatrics
 Pharmacology and Toxicology
 Physiology
 Psychology and Psychiatry
 Respiratory Science
 Social Medicine
 Surgery and Anaesthesia

Fifth year

This year includes five nine-week attachments in obstetrics and gynaecology; paediatrics; psychiatry and oncology; general practice, neurology and infectious diseases; dermatology, rheumatology and orthopaedics. The clinical attachments are based on wards, out-patient clinics and in general practices. There is also a dedicated pathology course at the start of this year.

Sixth year

This year comprises clinical attachments in accident and emergency medicine; general practice; cardiology; radiology; ENT and ophthalmology; two professional work experience attachments (one in medicine and one in surgery); one specialty choice module; an eight-week elective period which may be spent in the UK or overseas; private study; the Practical Medicine course, which provides specific sessions on preparing for the Foundation year 1 and the revision course which consolidates clinical knowledge preparatory to the final examinations which are held in June.

Examinations

The examinations will be as follows:

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| <i>Part 1</i> (first year) | Written papers in March and June with resits in September. |
| <i>Part 2</i> (second year) | Written papers in April and June with resits in September. |
| <i>Part 3</i> (third year) | Clinical and written components in May and June with resits in September. |
| <i>Part 4</i> (fifth year) | Clinical components held five times each year at the end of each attachment for obstetrics and gynaecology, paediatrics and psychiatry |
| <i>Part 5</i> (fifth year) | Written papers in July with resits in September covering paediatrics, psychiatry and pathology and related areas of general practice covered in the fifth year curriculum. |
| <i>Part 6</i> (sixth year) | Written and clinical components in June/July with resits in November/December. |
| <i>Part A</i> (third year) | BSc assessment of foundation course in December. |
| <i>Part B</i> (fourth year BSc) | BSc assessment of taught modules in February and project or additional taught modules in May/June. The project may be resubmitted the following May in the event of failure. |
| <i>Part C</i> (fourth year) | BSc assessment of project or additional taught modules in May/June. The project may be resubmitted the following May in the event of failure. |

A detailed description of each of these examinations can be found in each of the corresponding *Year Guides* issued to all students by the Undergraduate Medicine Office. Details of examination regulations and requirements for the MBBS/BSc, including information about the format of examinations, can be found in the *Academic Regulations and Requirements for Programmes of Study* available online at www.imperial.ac.uk/registry/publications.

Exemptions

A student who has previously successfully completed a relevant course of study in the University of London or other university or institution of similar standing, may be exempted from part of the examinations and/or course of study. All applications will be considered individually on their merits. The College may approve a shortened course of study for a student for whom exemption from part of the course or examinations has been approved under the paragraph above. The length of the course of study subsequent to registration for the MBBS degree only shall be not less than 34 months, or not less than 44 months for the MBBS/BSc.

The pre-registration year

In order to be registered with the General Medical Council, newly qualified graduates are required to undertake 12 months of pre-registration training in approved posts. This forms part of a two-year Foundation Programme. Posts may be applied for through the North West Thames Foundation School, which is a partnership between the School of Medicine, local deaneries and linked hospital trusts.