

MEDICINE (A100) ~ 5-YEAR PROGRAMME

Programme Specification

1. Awarding institution	Queen Mary, University of London (QMUL)
2a. Teaching institution	Barts and The London School of Medicine & Dentistry (the School)
2b. Work-based learning	Combination of experience at a teaching hospital, district general hospitals, specialist and community centres
3. Programme accredited by	General Medical Council (GMC)
4. Final award	MBBS (Bachelor of Medicine, Bachelor of Surgery)
5. Programme title	Medicine
6. UCAS code	A100
7. Subject Benchmark Statement	Medicine
8. Date of PS preparation/revision	April 2008

9. Educational aims of the programme

The programme aims to produce graduates with the knowledge, skills and attitudes that qualify them for practice in their first post in the Foundation School (FY1). Graduates will also have acquired the skills and attitudes for life-long education required to meet the needs of a developing health-care service and changing population needs.

These aims are met by an innovative, student-centred course of study, derived from appropriate learning outcomes expressed as learning objectives. Learning occurs in a rich variety of educational settings, using appropriate learning resources and informed by research and scholarship. Progression and achievement during and at the end of the programme are measured against agreed standards using appropriate assessment tools. All teaching, learning and assessment are informed by best educational practice. Effective pastoral care and guidance will support students throughout the programme.

The organisation of the programme is informed by the expectations of key stake-holders. Our curriculum therefore takes account of the following documents and policies:

- the General Medical Council's guidance, notably *Tomorrow's Doctors*;
- the Department of Health's plans for early postgraduate education, *Modernising Medical Careers*;
- the Quality Assurance Agency for Higher Education's *Subject Benchmark Statement for Medicine*;
- the Scottish Deans' Medical Curriculum Group's publication, *The Scottish Doctor*;
- the educational strategies of our parent institution, Queen Mary, University of London.

10. Intended learning outcomes – *the programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and appropriate attitudes, in the following areas:*

A. Knowledge and understanding

- A1. Physical, biomedical and social science concepts, principles, processes and mechanisms underpinning a systems-based approach to the body in health and disease
- A2. Health and illness in the context of the whole individual and his/her place in the family and community
- A3. Patients' and carers' experience of ill-health and medical care in a multi-cultural society
- A4. Disease prevention and health promotion in relation to public health medicine

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated:

Lectures; problem-based learning; tutor-facilitated tutorials; practicals; formative assessment workshops; clinical demonstrations; multi-media presentations (Learning Centre); community placements; ward rounds.

Assessment: coursework; written unseen examinations (MCQs, EMQs, SAQs); Objective Structured Clinical Examinations (OSCEs)

B. Skills

Intellectual skills

- B1. Recognise normal and abnormal function of body systems
- B2. Use effectively the various strands of knowledge and understanding in the context of treating patients
- B3. Apply problem-solving skills to the diagnosis and management of patients' clinical conditions

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated: Lectures; problem-based learning; tutor-facilitated tutorials; practicals; clinical demonstrations; community placements; ward rounds

Assessment: coursework; written unseen examinations (data interpretation SAQs); Objective Structured Clinical Examinations (OSCEs)

Professional practical/clinical skills

- B4. Proficiency in a stipulated range of clinical and communication skills in Medicine (consistent with the GMC's recommendations)
- B5. Ability to work independently and as part of a team, including with other healthcare professionals
- B6. Appropriate modes of interaction with patients and others involved in healthcare

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated: Problem-based learning; tutor-facilitated tutorials; practicals; clinical demonstrations; community placements; ward rounds; clinical skills simulator; structured interactions with (simulated) patients.

Assessment: coursework; Objective Structured Clinical Examinations (OSCEs)

Transferable (key) skills

- B7. Communicate effectively with a wide variety of individuals and groups, by using a variety of means
- B8. Record and evaluate his/her own academic, professional and clinical performance
- B9. Apply problem-solving and numerical skills in a range of theoretical and practical settings
- B10. Manage change and uncertainty effectively, and respond to changing demands
- B11. Take responsibility for continuing personal and professional learning and development (CPD)
- B12. Manage time, prioritise workloads, and recognise and manage personal emotions and stress
- B13. Apply appropriate information management skills (e.g. IT skills)
- B14. Develop basic skills in teaching, and knowledge of effective educational practice

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated: Transferable/key skills are generally included within modules/Systems and are related to relevant assessments as appropriate. Examples of strategies include: PBL; Student-Selected Components (SSCs; formerly known as Selected Study Modules, SSMs); study skills; personal portfolio.

C. Attitudes

- C1. Caring and ethical attitudes towards the practice of Medicine
- C2. Attitude of independence towards planning and directing one's own learning, with capacity for self-assessment

Teaching, learning and assessment methods used to enable outcomes to be achieved and demonstrated: Problem-based learning; workshops; inter-professional assignments / SSCs; personal portfolio.

Assessment: coursework (workbook assignment); SSC assessment; OSCEs

11. Programme structure, Levels, Modules/Systems

The MBBS programme is studied full-time over 5 years. Much of it is University-based, but a significant proportion is work-based in hospitals and community settings. Study is nominally undertaken at three Levels, but in greater breadth than for a conventional 3-year science degree programme.

The Curriculum Framework is structured into: Medical Knowledge; Patient Care; Communication; and Professionalism. Those domains are further divided into sub-domains, linked in turn to relevant learning outcomes that reflect index clinical conditions. The course material is divided into Systems or other subject-specific modules, which comprise the 'core curriculum'; Student-Selected Components (SSCs), the 'elective' and other elements make up the non-core programme, which comprises typically 25% of the total course.

See the accompanying diagram in the Appendix for a 'map' of the MBBS curriculum. Further details of the programme are available on the Curriculum '08 website at: <http://www.smd-edu.qmul.ac.uk/curriculum/index.php>

Stage 1 (National Levels 4+5)

Theme:

Stage 1A : Fundamentals of Medicine (Level 4)

Core studies cover an introduction to cellular structure and function, to cellular pathology, and introduce many basic skills and concepts, with an element of early clinical experience.

Stage 1B: Systems in Health (Levels 4+5)

Core studies include sections on each of the five Systems (CardioRespiratory, Metabolism, Brain & Behaviour, Locomotor, Human Development) and *People and Population Studies*, including a community placement. A minimum of two 2-week periods of SSC study.

Stage 2 (Level 5)

Theme: Systems in Disease

Core studies include sections on each of the five Systems and *People and Population Studies*, including a community placement. A minimum of two 2-week periods of SSC study.

Stage 3A (Level 6)

Theme: Integrated Clinical Studies

Core studies begin with an intensive programme in clinical methods and clinical science. This is followed by three long attachments for integrated clinical experience on all Systems, particularly Cardiorespiratory System and Metabolism. The emphasis is on integrated studies and the acquisition of practical clinical skills. A period of personal and professional development and of further studies of clinical science, complements these attachments. A minimum of two periods of SSC study.

Stage 3B (Level 6)

Theme: Clinical Specialities

Core studies provide clinical experience in attachments in Human Development, Brain and Behaviour, and the Locomotor System, accompanied by *People and Population Studies*. A minimum of two periods of SSC study, for the production of a dissertation.

Stage 4 (Level 6)

Theme: Preparation for Clinical Practice

Core studies include an attachment in Medicine and another in Surgery, one in Primary Care and another in Health Care of the Elderly. The core studies emphasise integrated clinical practice involving all Systems and related disciplines, and include a period of intensive preparation for the Foundation School post. Three periods of SSC study, one of which may be an 'elective' period (which often involves study in a clinical setting overseas at a placement of the student's choice).

The SSC curriculum

This provides students with a wide range of settings and activities for study in depth. Up to the limit that resources permit, students may choose which option to study. SSCs occur in each of the five years of the programme, and build into a coherent portfolio of completed and assessed activities, which must be satisfactorily completed by the end of the course for the award of MBBS. Each student's SSC portfolio is also subject to review at the end of each year.

12. Support for students and their learning

- One-week induction programme for orientation and introducing study skills
- Student handbooks providing an overview of the curriculum and student support, module/System student guides, virtual learning environment (CE6)
- Extensive library facilities, with electronic access from distant sites
- Staff-student ratio for teaching of about 1:4
- Clinical skills laboratory, with whole-body simulator and dedicated teaching staff
- Close collaboration between the Medical School and the hospital clinical sites
- Each student is allocated a Personal Tutor as part of a programme of pastoral support and academic guidance over the 5 years
- Access to QMUL services for Counselling & Welfare and for Disability & Dyslexia
- Dedicated IT laboratories and multi-media anatomy Learning Centre
- Pathology Museums with unique and extensive collections
- Active Student-Staff Committees

13. Criteria for admission

All students must be at least 18 years of age at the start of the programme.

Post-school applicant requirements: Grades of AAB from three A2s, two of which must be sciences, one of which must be Chemistry or Biology. General Studies may not be included in these three A2 subjects. Chemistry

and Biology must be passed at AS level. If one of these is not to be taken at A2, then a minimum B grade must be obtained at AS in that subject. AS and A2 examinations must normally be taken within a two-year period.

Although a separate Graduate Entrants' Programme (A101) is now available, many graduates still enter the 5-year programme. Graduate applicant requirements for the 5-year programme (A100) are: a minimum of an upper-second class Honours degree in any discipline; a satisfactory standard in Chemistry and Biology must be demonstrated, either by proof of these subjects contributing substantially to the applicant's degree, or by grades of CC in A-level in Chemistry and Biology *prior* to degree studies; graduate applicants not meeting this latter requirement will require at least grade B in Chemistry and Biology at AS level.

Provision is made for small numbers of dentists (qualified to full MFDS level), and for students from other UK medical schools, to enter the programme at the start of the third year of study. Such entrants are subject to special requirements to be exempt from the first two years of study. Qualifications other than those given here may also be acceptable. Full details of entry requirements for all types of applicant can be found in the School of Medicine and Dentistry Prospectus and on-line at: <http://www.smd.qmul.ac.uk/undergraduate/apply/index.html>

The admissions process also includes selection *via* UKCAT score and a structured interview.

Additional requirements:

- All students will be offered screening (e.g. hepatitis B status) to assess their fitness to undertake certain clinical components of the degree, but a programme free of exposure-prone procedures is also available.
- Declaration of disclosure of any criminal convictions, including those outstanding (police check)

14. Regulation of assessment

Students should consult the Academic Regulations website for general rules concerning conduct of assessment at QMUL: <http://www.studentadmin.qmul.ac.uk/QA/academicregulations.pdf>

Assessment rules, Distinction/Merit classification

- Pass mark is 50% for all assessments in Medicine.
- Overview of assessment processes is provided in the MBBS Curriculum Overview, with full details in the module/System student guides.
- 'Merit' is awarded at end-of-year examinations to those students who typically comprise the top quartile of the cohort.
- 'Distinction' may be awarded at three points in the programme: in *Medical Science*, in *Clinical Science* and in *Clinical Practice*; it is typically awarded to those students in the top decile of the cohort at each point.
- Satisfactory completion of each year's complement of SSCs is essential for progression to the next year.

Summary of grades, marks and their interpretation

GRADE	MARK	INTERPRETATION
A	70% and above	Excellent performance
B	60 – 69%	Good performance
C	50 – 59%	Satisfactory performance
D	45 – 49%	Marginal fail
E	44% and below	Poor performance

Role of External (Visiting) Examiners

External Examiners are appointed by the College, with (typically) 4 Examiners for each Part of the MBBS degree. Their role is that of moderator, in line with QAA guidelines, to:

- approve all examination questions, and review coursework and examination scripts;
- comment on the academic and professional standards achieved by students;
- attend meetings of Examination sub-Board (for that Part of the MBBS degree)

15. Methods for evaluating and improving the quality and standards of teaching & learning

Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum, and outcome standards

- Module/System reviews (feedback questionnaires and staff reports)
- Annual Review of Teaching, considered by the School and by QMUL
- Annual staff appraisal, and peer observation of teaching
- Reports by External Examiners

- Audits of clinical placements by senior officers of the School
- Periodic review by the GMC Education Committee (QABME)

Committees with responsibility for monitoring and evaluating quality and standards

- Quality Enhancement Committee (QMUL)
- Education Board (School)
- Medical Education Committee
- Medical Education Quality Enhancement Committee
- Examination (sub-) Boards
- Student-Staff Committees
- Meetings of senior School managers and the Associate Deans in the Associated Teaching Hospitals (partner NHS Trusts)

Mechanisms for gaining student feedback on the quality of teaching and their learning experience

- Student-Staff Committees
- Student representation on School and College committees/boards
- Questionnaire-based evaluation of modules/Systems, supported by group discussions (e.g. Nominal Group Technique) and whole-year reviews (with School-based and NHS-based teaching staff, plus student representatives)
- Annual visits by the Dean for Education and senior staff to the Associated Teaching Hospitals and partner NHS Trusts, to meet with students on clinical placement there
- National Student Survey (annually)

Staff development priorities include:

- Staff appraisal scheme, supported by QMUL and School staff development courses
- Encouragement to gain membership of the Higher Education Academy (HEA)
- Regular course team meetings, and comprehensive annual review and planning for coming academic year
- Full training for all potential PBL tutors
- Inter-professional training offered to teaching staff in partner hospitals also

16. Indicators of quality and standards

- Independent review of the quality of educational provision in Medicine by the QAA Subject Review process in 2000, with an aggregate score of 21 out of 24
- Satisfactory review of MBBS curriculum and of postgraduate training by the GMC in 2000, with numerous areas of commendation
- Satisfactory review of educational provision and quality by QMUL Internal Review in 2006, with numerous areas of commendation
- Commendations by External Examiners (and very few criticisms)
- National Student Survey 2007 generated an 'overall satisfaction' rating of 3.9 out of 5
- The School was awarded in 2005 a prestigious Centre for Excellence in Teaching and Learning (CETL) aimed at promoting professional practice in its undergraduate curricula. The award also recognises the strength of the Strategic Alliance between QMUL and City University in the area of healthcare studies and inter-professional education, the latter being a major NHS initiative.

17. Employer links

- Careers advice sessions are held at regular intervals throughout the 5 years, supported by the student's personal portfolio.
- Whilst on clinical placement during the MBBS course, students are exposed to the working environment within the NHS, both in district general hospitals and with general practitioners.
- The Elective period provides another opportunity to experience working with potential employers.
- The FY1 shadowing assignment immediately after graduation prepares the new doctor for his/her first post.
- The Foundation Programme, organised by the London Deanery in collaboration with the Medical School, provides new graduates with a structured clinical education in the local region.

Please note. This Specification provides a concise summary of the main features of the MBBS programme, and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if

he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching/learning/assessment methods can be found in the course handbooks and the individual module/System guides, as well as on the websites whose URLs are provided in this Specification.

Key sources of information about the course can be found in:

- Barts and The London prospectus; College (QMUL) prospectus
- Student Handbooks (School); Student Guide (College)
- QAA Subject Review report for Medicine, Queen Mary, 2000
- GMC Visitation report, Barts and The London, 2000
- The School's 'Education' website: <http://www.smd-edu.qmul.ac.uk/>

Person completing Programme Specification	Dr Mark Carroll
Person responsible for management of programme	Prof. Chris Fowler and Prof. Susan Dilly
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