MRCS Part A Course: Basic Sciences and Clinical Application

Basic science subjects such as anatomy, physiology, pathology and microbiology are the principal components for developing a strong foundation for surgical training and for the understanding of its clinically applied aspects such as surgical anatomy and critical care physiology. As such, these subjects form an integral part in the MRCS A exam.

This two-day course provided the attendee with an overview of basic physiological principles, consolidated the candidate's core and applied surgical knowledge in anatomy and relevant pathology, and provided a focused revision of pertinent topics as tested in the exam.

The course was structured into two distinct but related days. On day 1, the emphasis was on basic and applied pathology, basic physiology and critical care, principles of surgery and clinical topics. Day 2 predominately featured topics on basic and surgically applied anatomy, and its related pathology. Microbiology pertinent to MRCS A was also covered on day 2. It was advised that candidates attend both days of the course to obtain full benefit but if they were particularly strong in the topics on day 1 or day 2, then they had the option of attending just one day of the course.

Candidates who attended this course received full access to MRCS Part A online educational resources from www.doctorexams.co.uk for a 4 month period. This resource contains 100s of SBA and EMQ questions for practice. In addition, they also received full access to all presentations via a secure, online link. All these benefits and privileges were included within the course fee.
## Course Programme

### Day 1

**SURGICAL PATHOLOGY, PRINCIPLES OF SURGERY AND APPLIED SURGICAL SCIENCES**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>0930 - 0945</td>
<td>Registration and Coffee</td>
</tr>
<tr>
<td>0945 - 1000</td>
<td>Format of MRCS Exam and Preparation</td>
</tr>
<tr>
<td>1000 - 1045</td>
<td>Management of Trauma</td>
</tr>
<tr>
<td>1045 - 1115</td>
<td>Pre-operative assessment</td>
</tr>
<tr>
<td>1115 - 1145</td>
<td>Post-operative management</td>
</tr>
<tr>
<td>1145 - 1215</td>
<td>Fundamentals of wound healing</td>
</tr>
<tr>
<td>1215 - 1230</td>
<td>Principles of Local Anaesthetics</td>
</tr>
<tr>
<td>1230 - 1245</td>
<td>Sutures, needles and suture materials</td>
</tr>
<tr>
<td>1245 - 1300</td>
<td>Lumps and benign lesions</td>
</tr>
<tr>
<td>1300 - 1340</td>
<td>Lunch</td>
</tr>
<tr>
<td>1345 - 1415</td>
<td>Management of burns</td>
</tr>
<tr>
<td>1415 - 1500</td>
<td>Tumours of colon, prostate, thyroid and breast</td>
</tr>
<tr>
<td>1500 - 1530</td>
<td>Skin cancers including melanoma</td>
</tr>
<tr>
<td>1530 - 1550</td>
<td>Break for refreshments</td>
</tr>
<tr>
<td>1550 - 1640</td>
<td>Ulcers, vascular pathology, thrombus and embolus</td>
</tr>
<tr>
<td>1640 - 1720</td>
<td>Management of Head Injury</td>
</tr>
<tr>
<td>1720 - 1820</td>
<td>Cardiovascular and Respiratory Critical care physiology</td>
</tr>
<tr>
<td>1820 - 1830</td>
<td>Summary</td>
</tr>
<tr>
<td>1830</td>
<td>End of Course</td>
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</tbody>
</table>

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## Course Programme

### Day 2

**SURGICAL AND APPLIED ANATOMY (AND RELEVANT PATHOLOGY), AND MICROBIOLOGY**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0845</td>
<td>Registration and Introduction to Day 2</td>
</tr>
<tr>
<td>0900 - 0930</td>
<td>Assessment and mock exam</td>
</tr>
<tr>
<td>0930 - 1030</td>
<td>Brachial plexus, arm, shoulder, scapula, back and rotator cuff (includes upper limb nerve injuries, palsies and shoulder pathologies)</td>
</tr>
<tr>
<td>1030 - 1100</td>
<td>Cubital fossa, forearm, flexor retinaculum and hand (includes carpal tunnel syndrome, ulnar nerve palsies, hand pathologies)</td>
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<tr>
<td>1100 - 1120</td>
<td>Break for refreshments</td>
</tr>
<tr>
<td>1120 - 1145</td>
<td>Neck</td>
</tr>
<tr>
<td>1145 - 1215</td>
<td>Scalp and face</td>
</tr>
<tr>
<td>1215 - 1300</td>
<td>Mediastinum, Heart, Lungs and Diaphragm</td>
</tr>
<tr>
<td>1300 - 1340</td>
<td>Lunch</td>
</tr>
<tr>
<td>1340 - 1410</td>
<td>Microbiology essentials for MRCS A</td>
</tr>
<tr>
<td>1410 - 1440</td>
<td>Thoracic wall; Vascular anatomy of thorax, head and neck and thorax (includes vascular access and chest drain insertion)</td>
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<tr>
<td>1440 - 1530</td>
<td>Transpyloric plane, anterior abdominal wall and inguinal region (includes hernia)</td>
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<tr>
<td>1530 - 1550</td>
<td>Break for refreshments</td>
</tr>
<tr>
<td>1550 - 1630</td>
<td>Abdominal and pelvic anatomy (includes bowel pathologies and segmental bowel resections)</td>
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<tr>
<td>1630 - 1700</td>
<td>Lumbar and lumbosacral plexus</td>
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<tr>
<td>1700 - 1745</td>
<td>Femoral triangle, thigh, popliteal fossa; Lower leg, ankle and foot (includes lower limb nerve injuries, palsies, compartment syndrome and ankle injuries)</td>
</tr>
<tr>
<td>1745 - 1815</td>
<td>Questions and Clarifications</td>
</tr>
<tr>
<td>1815 - 1830</td>
<td>Exam preparation timetable and Tips</td>
</tr>
<tr>
<td>1830</td>
<td>End of Course</td>
</tr>
</tbody>
</table>
Overall Teaching Feedback

**How was the content of the course?**
- Excellent: 50%
- Good: 50%

**How was the clarity of presentations?**
- Excellent: 66%
- Good: 34%

**How would you rate the relevance of the course to your exam?**
- Excellent: 83%
- Good: 17%

**How would you rate the general academic standard of the lectures?**
- Excellent: 66%
- Good: 34%

**Brachial plexus, Arm, Shoulder, Scapula, Back**
- Excellent: 50%
- Good: 50%

**Cubital Fossa, Forearm, Hand**
- Excellent: 66%
Overall Teaching Feedback

- **Head and Face**
  - Excellent: 60%
  - Good: 40%

- **Neck**
  - Excellent: 50%
  - Good: 50%

- **Mediastinum, Heart, Lungs and Diaphragm**
  - Excellent: 66%
  - Good: 34%

- **Thoracic Wall**
  - Excellent: 67%
  - Good: 33%

- **Vascular Anatomy**
  - Excellent: 66%
  - Good: 34%

- **Anterior Abdominal Wall/Inguinal Region**
  - Excellent: 50%
  - Good: 50%
Overall Teaching Feedback

Abdominal anatomy

- Excellent: 63%
- Good: 37%

Lumbar and lumbosacral plexus

- Excellent: 66%
- Good: 34%

Femoral triangle, Thigh, Popliteal Fossa

- Excellent: 66%
- Good: 34%

Lower Leg and Ankle

- Excellent: 67%
- Good: 33%

Head and Neck Pathology

- Excellent: 83%
- Good: 17%

Colectomies and Stoma

- Excellent: 50%
- Good: 50%
Overall Teaching Feedback

**Management of Burns**
- Excellent: 33%
- Good: 67%

**Physiology Topics**
- Excellent: 83%
- Good: 17%

**Skin Cancers**
- Excellent: 50%
- Good: 50%

**Malignant Melanoma**
- Excellent: 76%
- Good: 24%

**Fundamentals of Wound Healing**
- Excellent: 39%
- Good: 61%

**Sutures**
- Excellent: 33%
- Good: 67%
Overall Teaching Feedback

- Ulcers:
  - Excellent: 17%
  - Good: 83%

- Neurophysiology:
  - Excellent: 50%
  - Good: 50%

- Basic Pathology:
  - Excellent: 38%
  - Good: 62%

- Basics of Genetics:
  - Excellent: 47%
  - Good: 53%

- Testicular Tumours:
  - Excellent: 33%
  - Good: 67%

- Essential Microbiology:
  - Excellent: 34%
  - Good: 66%
Overall Teaching Feedback

**Tuberculosis**

- Excellent: 50%
- Good: 50%

**Basics of Statistics**

- Excellent: 50%
- Good: 50%

**Fractures/Neck of Femur fracture**

- Excellent: 61%
- Good: 39%

**Local Anaesthesia**

- Excellent: 66%
- Good: 34%

**How was the general friendliness of the faculty and organisers?**

- Very friendly: 100%

**Would you recommend this course to a friend?**

- Most certainly: 87%
- Certainly: 13%
Overall Teaching Feedback

Do you think that this course provided good value for money?

- Most certainly
- Certainly
- Probably
- Unlikely
- Not at all

70%
30%
Individual Comments

Overall I was very happy with the course and am seriously considering attending the next sitting before the MRCS!

KW
St Mary’s Hospital, London

Very worthwhile course.

JD
Antrim Hospital, Antrim

Excellent course led by Professor Enoch. He has an excellent level of knowledge for the MRCS and was able to include all members of the class despite varying levels of experience. An intensive 2 days but a must attend course prior to sitting the Part A of the exam.

AR
Leeds General Infirmary, Leeds

Excellent fabulous teaching for passing MRCS PART A.

AK
Kettering General Hospital, Kettering

Very good.

ZA
Kettering General Hospital, Kettering
Doctors Academy is a UK-based International Non-Profit Organisation comprising of doctors, dentists and scientists that undertakes a diverse range of educational activities globally. The aim of the Academy is to disseminate information and exchange medical knowledge between professionals from diverse backgrounds working in a variety of healthcare settings. This is achieved by the provision of a number of attendance courses, publishing house, online resources and international events/competitions.

Courses (a selection):

Undergraduate:
- Final Year Medicine and Surgical Revision Courses
- Training the Clinical Anatomy Trainer
- Clinical Anatomy as Applied to Trauma and Emergency Medicine
- Surgical Anatomy of Important Operative Procedures
- Future Surgeons: Key Skills (RCSEd delivered)
- Structured Introduction to Surgical Skills

Postgraduate:
- MRCS Part A
- MRCEM Part A
- MRCS Part B OSCE
- DOHNS: Intensive Revision & OSCE
- Intercollegiate Basic Surgical Skills (RCSEd delivered)
- MRCP PACES Part 2
- FRCS (General Surgery) Exit Exam
- Cadaveric Ultrasound-Guided Musculoskeletal Intervention Course
- Ultrasound-Assisted Botulinum Toxin Injection for Neuromuscular Disorders
- Live Advanced Laparoscopic Colorectal Course

Forthcoming key events:
- International Medical Summer School
  Manchester, 31st July to 4th August 2017
- International Academic and Research Conference
  Manchester, 5th August 2017
- World University Anatomy Challenge
  Manchester, 4th August 2017

Publications

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Online Revision Resources

DoctorExams consists of 1000s of questions with detailed explanations in MCQ, EMQ, SBA and SAQ formats. Questions are written by the Doctors Academy group of experienced clinicians and clinical academics, with mock exams and feedback on performance included to aid a candidate's focused revision of topics. Based on past exams, these questions are carefully crafted to suit the requirements of undergraduate students & postgraduate trainees undertaking relevant specialty exams.

Resources for:
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- Dental Students
- International Entrance Exams
- MRCS Exams

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