



# DOCTORS ACADEMY

BETTER EDUCATION. BETTER HEALTH.



**Cardiff MRCS OSCE Course:  
Applied Surgical Sciences  
and Critical Care**

**Feedback - April 2019**

## Cardiff MRCS OSCE: Applied Surgical Sciences and Critical Care

In the final part of the MRCS exam, surgical trainees are expected to have a good working knowledge of general physiological principles, core knowledge of the physiology of specific systems and an understanding of their application in surgical practice.

This intensive one-day revision course provided the candidates with an overview of basic physiological principles and the physiology of the respiratory, cardiovascular, renal, endocrine, gastrointestinal, and central nervous systems.

The course was delivered using a series of interactive lectures with an OSCE focus using OSCE scenarios. All major areas as stipulated in the MRCS Part B syllabus were covered.

### Course Information

<b>Course Date:</b>	<b>25<sup>th</sup> April 2019</b>
<b>Venue:</b>	<b>School of Biosciences, Cardiff University, Cardiff</b>
<b>Attendance:</b>	<b>35 Delegates</b>
<b>Aimed at:</b>	<b>Delegates looking to take their membership to the Royal College of Surgeons Part B exam.</b>
<b>Course Fee:</b>	<b>£190.00</b>



Surgical trainees can apply to be sponsored by ASiT to receive a bursary to attend this course.

### Topics:

- General Physiological Principles
- Cardiovascular System
- Respiratory System
- Endocrine System
- Renal System
- Central Nervous System
- Gastrointestinal System
- Burns
- Management of Patients Undergoing Surgery
- Management of Trauma
- Surgical Microbiology



# Course Programme

0815 - 0820            **Registration**

## MORNING SESSION

0820 - 0830            **Welcome, Introduction and Format (Prof Stuart Enoch)**

0830 - 0930            **Physiological Principles in the Management of Trauma (Prof Stuart Enoch)**

- Long bone fractures
- Fracture neck of femur
- Pelvic fractures
- Polytrauma
- Compartment syndrome
- Nerve injuries

0930 - 1040            **Respiratory System (Dr Teresa Evans)**

- Normal ventilatory cycle
- Controls of ventilation
- Causes and management of post-operative respiratory failure
- Indications for ventilatory support and weaning off ventilator
- Intermittent positive pressure ventilation
- Acute (adult) respiratory distress syndrome

1040 - 1100

**Coffee Break**

1110 - 1140            **General Physiological Principles 1 (Dr Paul Morgan)**

- Homeostasis, feedback loops
- Applied acid-base balance

1145 - 1215            **General Physiological Principles 2 (Dr Paul Morgan)**

- Sepsis
- Septic shock

1220 - 1300            **General Physiological Principles 3 (Dr Paul Morgan)**

- Bleeding
- Coagulation/Anti-coagulation

1300 - 1340

**Lunch Break**

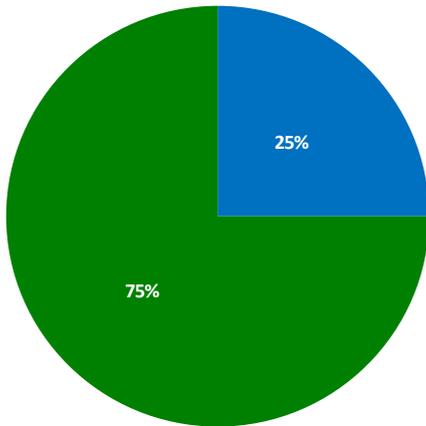
# Course Programme

## AFTERNOON SESSION

<b>1340 - 1420</b>	<b>Management of Major Burns (Prof Stuart Enoch)</b> <ul style="list-style-type: none"><li>• Assessment</li><li>• Pathophysiology and principles of management</li><li>• Inhalation burns</li><li>• Fluids and nutrition</li><li>• Indications for referral</li></ul>
<b>1425 - 1445</b>	<b>Rhabdomyolysis (Prof Stuart Enoch)</b>
<b>1445 - 1515</b>	<b>General Physiological Principles 4 (Dr Paul Morgan)</b> <ul style="list-style-type: none"><li>• Resuscitation</li><li>• Temperature regulation</li><li>• Hypothermia</li></ul>
<b>1515 - 1545</b>	<b>General Physiological Principles 5 (Dr Paul Morgan)</b> <ul style="list-style-type: none"><li>• Principles of epidural anaesthesia/assessment</li><li>• Pain pathways</li><li>• Pre-op assessment</li></ul>
<b>1545 - 1605</b>	<b>Coffee Break</b>
<b>1605 - 1635</b>	<b>Central Nervous System (Dr Paul Morgan)</b> <ul style="list-style-type: none"><li>• Cerebral autoregulation</li><li>• Causes and management of raised intra-cranial pressure</li><li>• Management of head injury</li></ul>
<b>1635 - 1725</b>	<b>Spinal Cord Injuries and Cord Syndromes (Prof Stuart Enoch)</b> <ul style="list-style-type: none"><li>• Vertebral fractures</li><li>• Cord compression; conus medullaris and cauda equina syndrome</li><li>• Spinal and neurogenic shock</li><li>• Autonomic nervous system and bladder dysfunction</li><li>• Spinal cord lesions and vascular conditions</li></ul>
<b>1730 - 1800</b>	<b>Infection and Surgical Microbiology (Prof Stuart Enoch)</b> <ul style="list-style-type: none"><li>• Tuberculosis</li><li>• Necrotising fasciitis</li></ul>
<b>1800 - 1830</b>	<b>Calcium Metabolism and Its Role in Surgery (Prof Stuart Enoch)</b>
<b>1830 - 1915</b>	<b>OSCE Topics and Scenarios in Surgical Critical Care (Prof Stuart Enoch)</b>
<b>1915</b>	<b>END OF COURSE!</b>

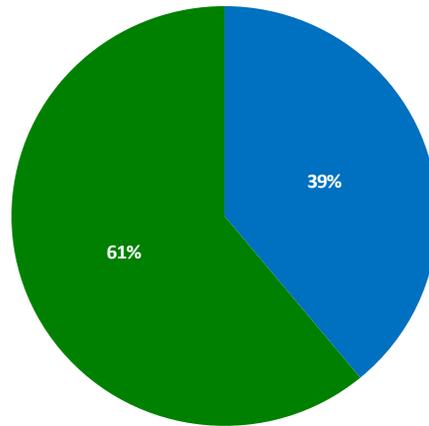
# Overall Teaching Feedback

How was the content of the course?



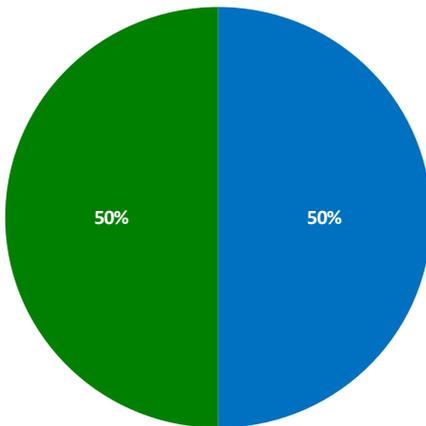
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

How was the clarity of the presentations?



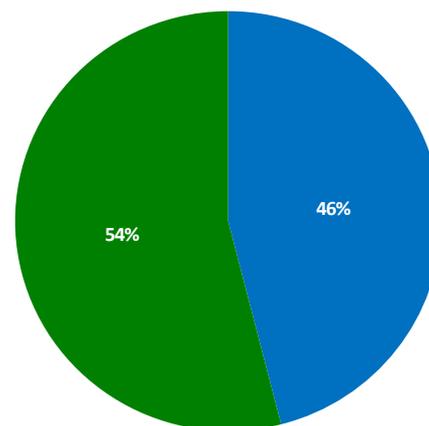
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

How do you rate the relevance of the course to your exam?



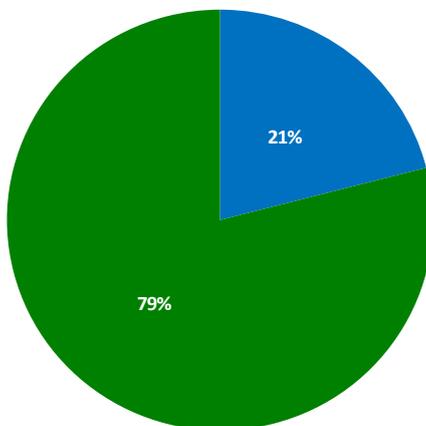
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

How would you rate the general academic standard of the lectures?



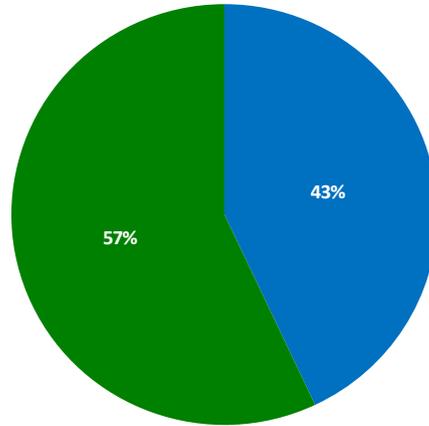
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Homeostasis and Fluid Management



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

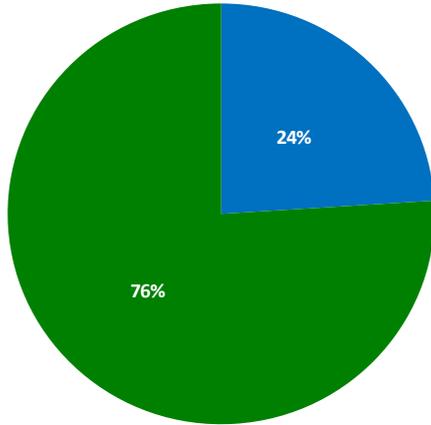
Applied Acid-Base Balance



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

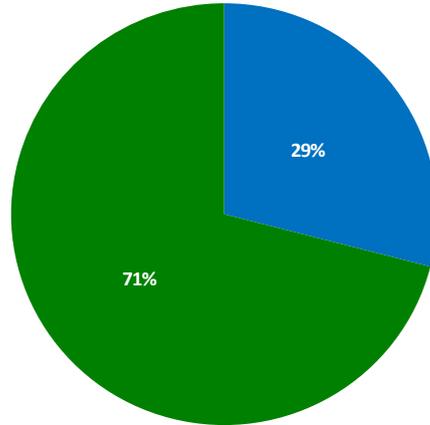
# Overall Teaching Feedback

Sepsis



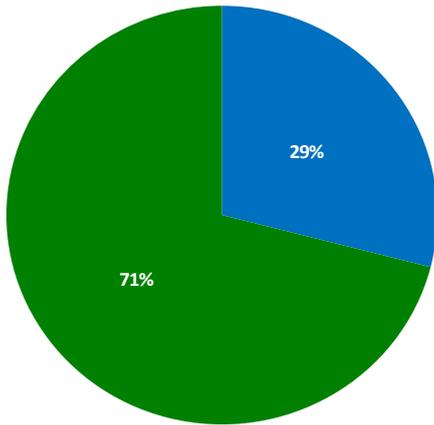
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Septic Shock



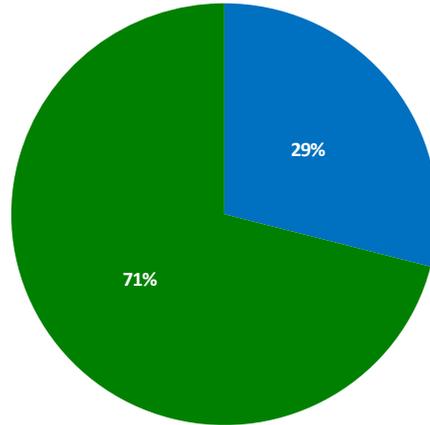
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Normal Ventilatory Cycle



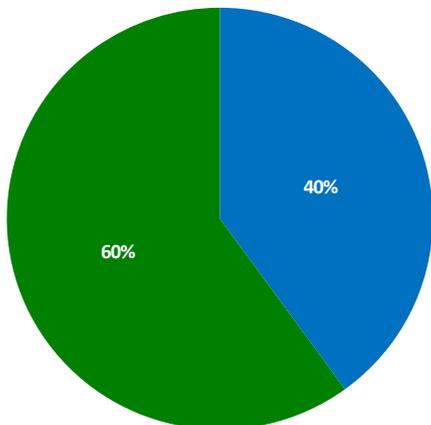
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Controls of Ventilation



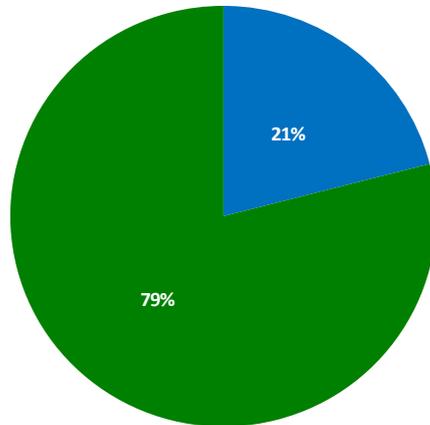
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Causes and Management of Post-Operative Respiratory Failure



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

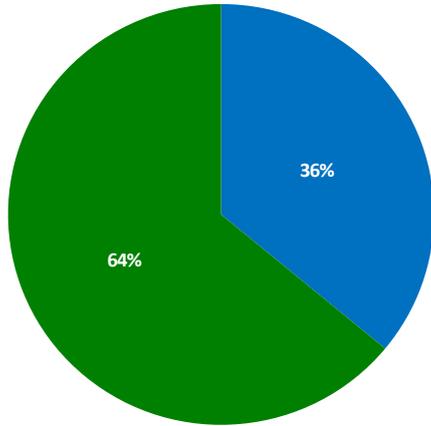
Indications for Ventilatory Support and Weaning Off Ventilator



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

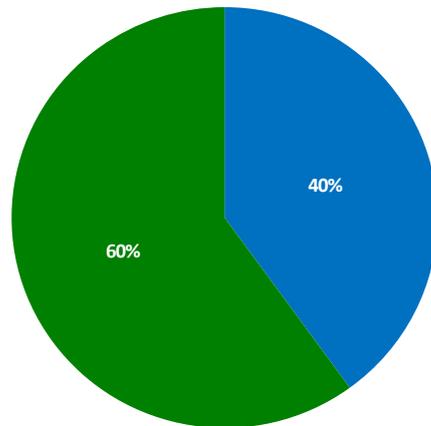
# Overall Teaching Feedback

Intermittent Positive Pressure Ventilation



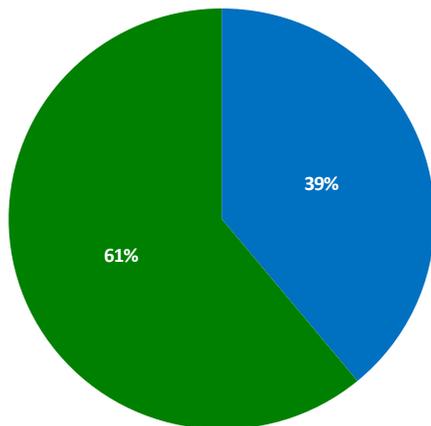
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Acute Respiratory Distress Syndrome



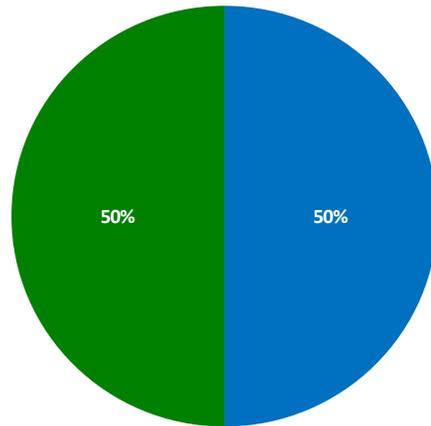
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Pathophysiology and Principles of Management in Burns



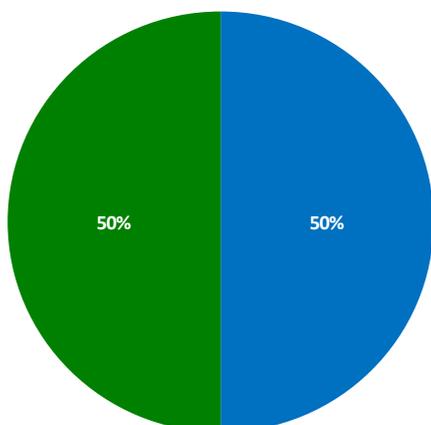
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Inhalation Burns



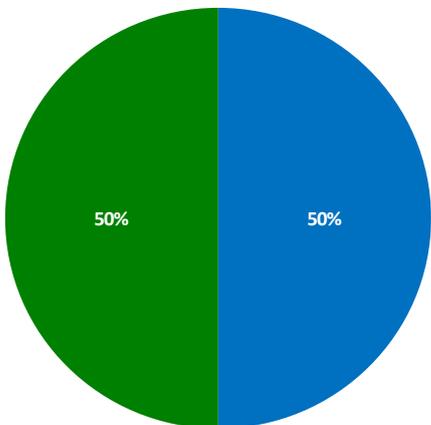
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Fluids and Nutrition in Burns



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

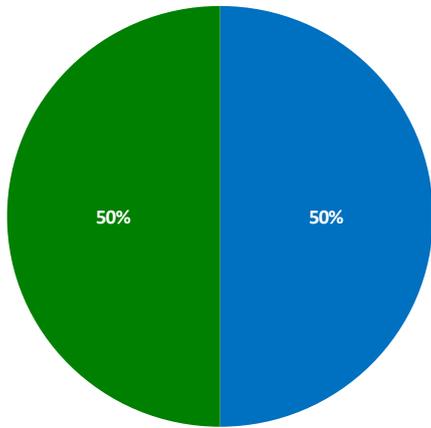
Indications for Referral in Burns



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

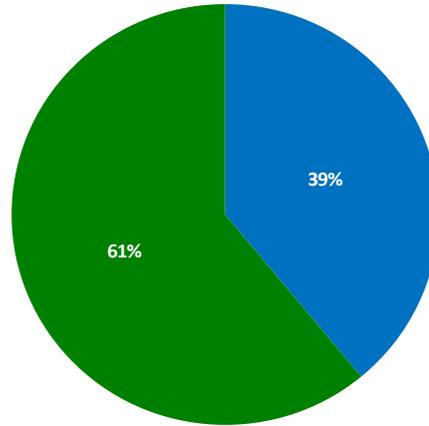
# Overall Teaching Feedback

Principles of Management of Pelvic Fractures



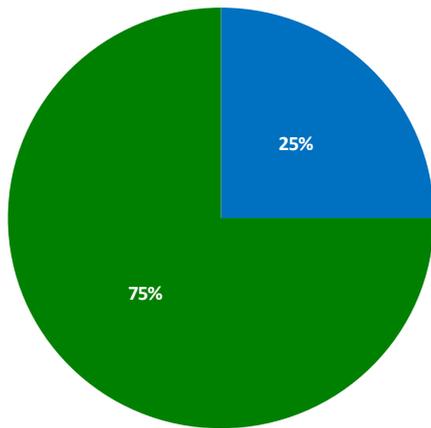
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Long Bone Fractures



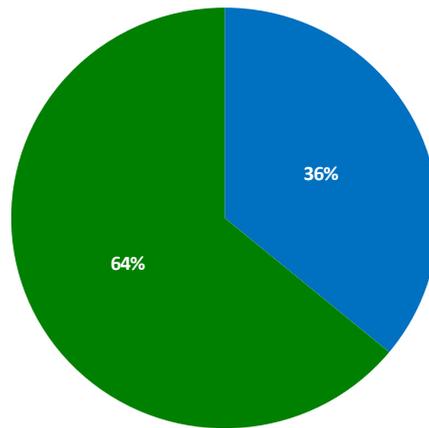
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Basics of Tuberculosis



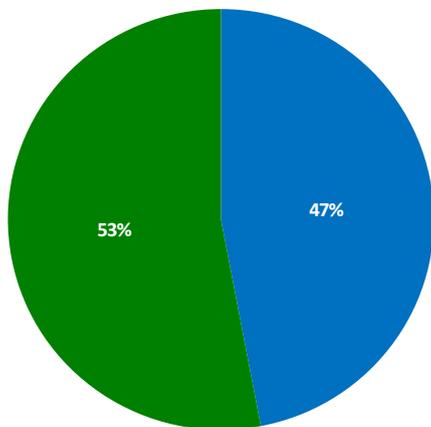
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Bleeding



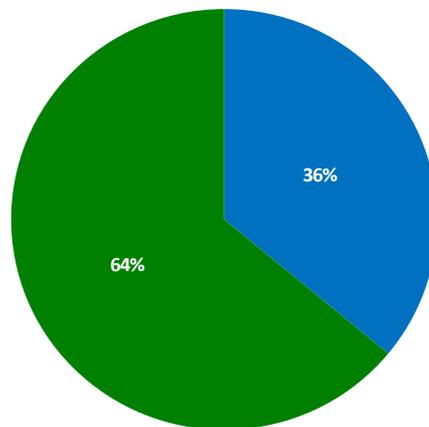
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Coagulation/Anti-Coagulation



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

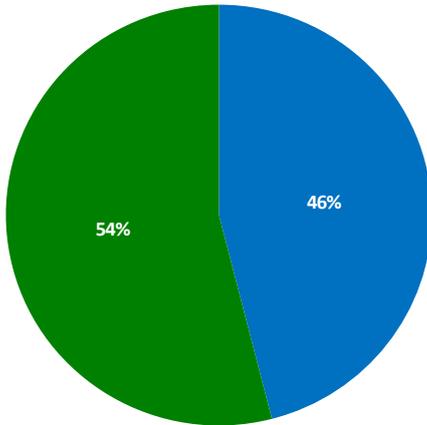
Resuscitation



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

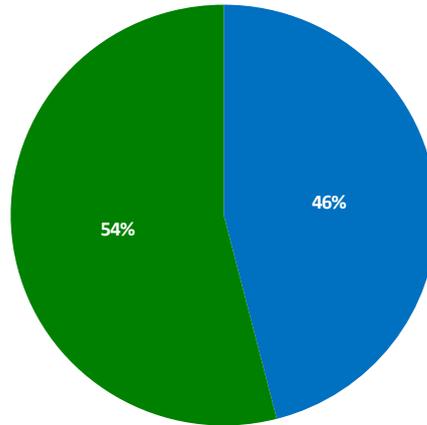
# Overall Teaching Feedback

Temperature Regulation



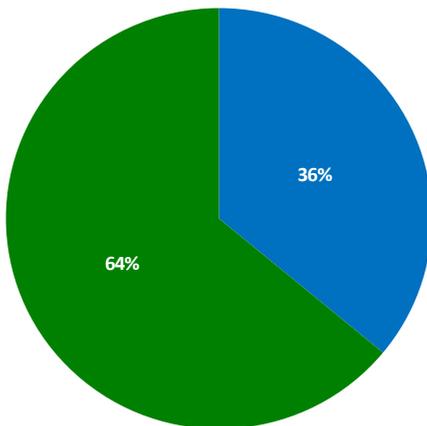
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Hypothermia



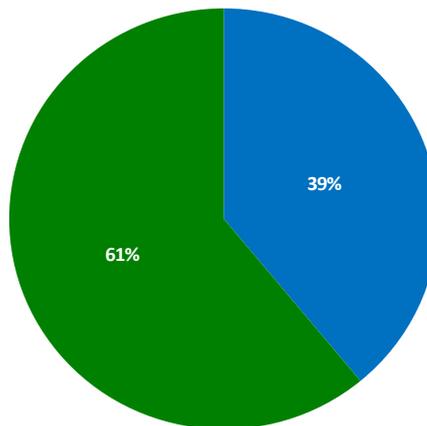
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Necrotising Fasciitis



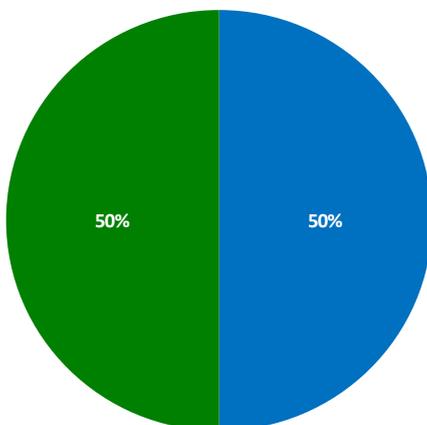
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Calcium Metabolism



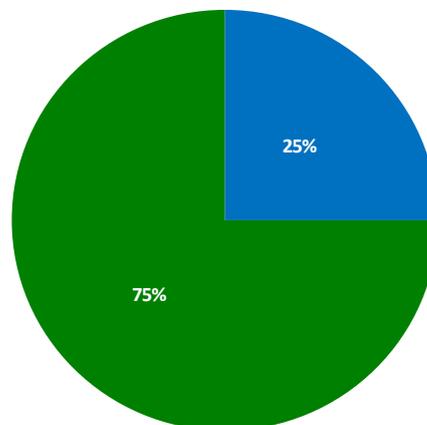
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Principles of Epidural Anaesthesia/Assessment: Pain Pathways



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

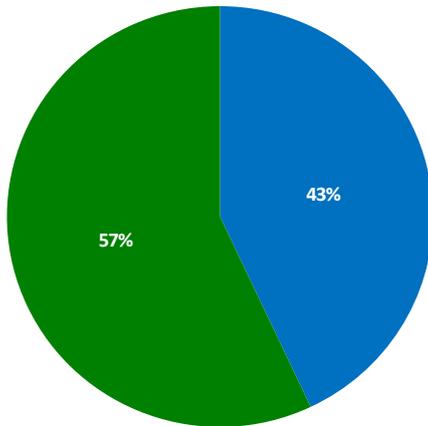
Rhabdomyolysis



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

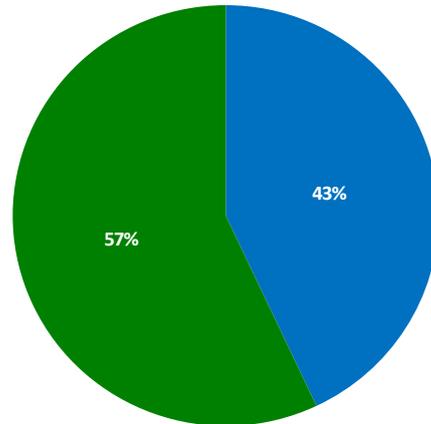
# Overall Teaching Feedback

Head Injury



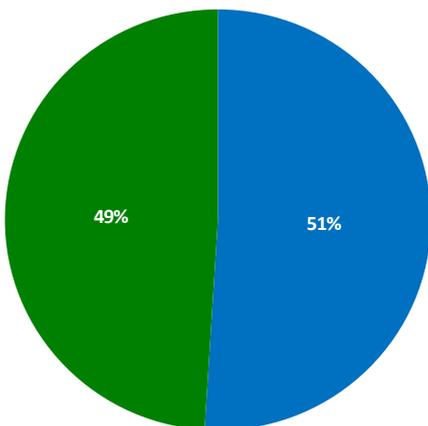
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Subarachnoid Haemorrhage



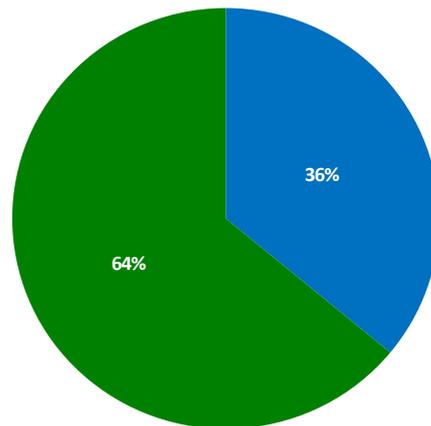
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Spinal Cord Lesions



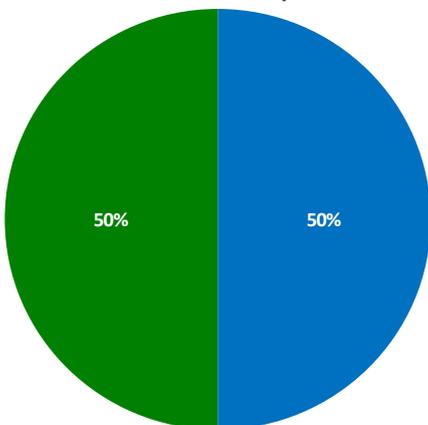
■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

Would you recommend this course to a friend?



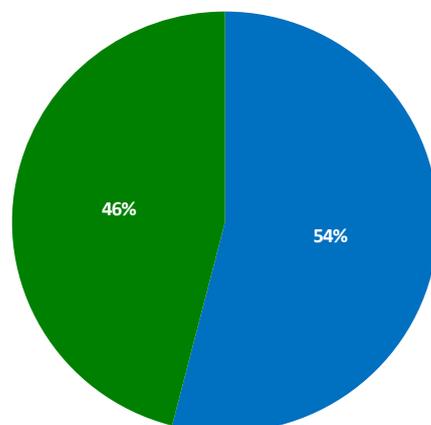
■ Most certainly ■ Certainly ■ Neutral ■ Maybe ■ Don't think so

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



■ Most certainly ■ Certainly ■ Neutral ■ Maybe ■ Don't think so

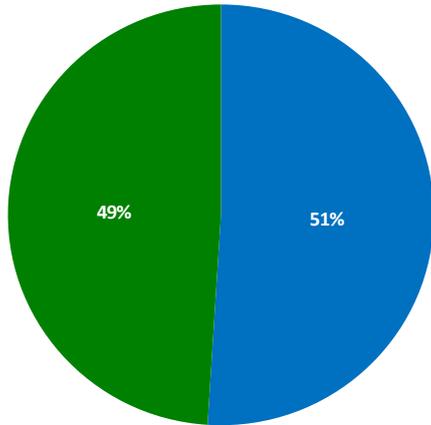
How were the facilities and venue?



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

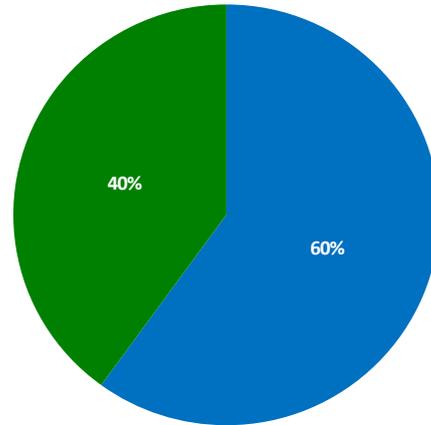
# Overall Teaching Feedback

How were the refreshments and lunch?



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor

How was the general friendliness of the faculty and organisers?



■ Very friendly ■ Friendly ■ Neutral  
■ Not very friendly ■ Can't comment

## Individual Comments

It was very good. It provided a really useful overview and a way to consolidate knowledge, whilst identifying areas for further learning in the run up to the exam.

**AS**

***University Hospital of North Staffordshire NHS Trust, United Kingdom***

It was excellent. I felt that it was very useful when preparing for part B.

**SK**

***Chesterfield Royal Hospital NHS Foundation Trust, United Kingdom***

Excellent.

**AS**

***Sherwood Forest Hospitals NHS Foundation Trust, United Kingdom***

Excellent.

**GI**

***Rashid Hospital, Dubai Health Authority, UAE***

It was great.

**TL**

***Musgrove Park Hospital, Taunton, United Kingdom***

Excellent.

**AH**

***Royal London Hospital, London, United Kingdom***

It was great and very instructive.

**MH**

***Macclesfield District General Hospital, Macclesfield, United Kingdom***

It was very good, and I enjoyed it. It was a very intense but useful course. I will recommend it.

**RS**

***John Radcliffe Hospital, Oxford, United Kingdom***

Overall, it was a very good course. The anatomy component was excellent.

**GN**

***Royal Liverpool University Hospital, Liverpool, United Kingdom***

Excellent.

**TW**

***Airedale NHS Foundation Trust, United Kingdom***

## Individual Comments

It was a very useful and up-to-date course.

**MB**  
*Jinnah Hospital, Lahore, Pakistan*

I was very impressed.

**EO**  
*Bon Secours Hospital, Cork, Ireland*

It was very helpful. I can now concentrate on the topics I am weak at.

**SB**  
*Columbia Asia Hospital*

The critical skills day was good.

**VM**  
*Royal Bolton Hospital, Bolton, United Kingdom*

It was very organised with lots of material covered. This was a great opportunity.

**EM**  
*Morriston Hospital, Swansea, United Kingdom*

Excellent teamwork by Professor Enoch, Rebecca and Janine.

**JA**  
*Manchester Royal Infirmary, Manchester, United Kingdom*

Excellent.

**TY**  
*Royal Glamorgan Hospital, Llantrisant, United Kingdom*

Excellent.

**NB**  
*Diana Princess of Wales Hospital, Grimsby, United Kingdom*

It was very useful and essential.

**ZA**  
*Portsmouth Hospitals NHS Trust, United Kingdom*

Excellent.

**RA**  
*Royal Hospitals, Belfast, United Kingdom*

## Individual Comments

This was an outstanding course, with professional standards and knowledgeable faculty.

**KV**

***Queen Victoria Hospital, East Grinstead, United Kingdom***

## Testimonials

I just wanted to say that I was successful in the MRCS Part B exam written in May. I attended the full five-days of the course which I found very useful. The detail on each day of the course ensured that the most frequently tested areas were well covered.

The exposure to live cadavers and specimens was even better to both teach and reinforce already acquired knowledge. Repetition on the second day of anatomy and the use of mock stations with feedback was a really good idea. The final day in a clinical setting with simulators was helpful to mirror the reality of the exam too.

The course was definitely worth every penny and second. I also found that the faculty were very knowledgeable and resourceful. Well done Doctors Academy. Definitely six stars!

**EO**

***Bon Secours Hospital, Cork, Ireland***

The Doctors Academy course provided great preparation. I did find the anatomy stations slightly easier than the Cardiff course, as Professor Enoch had said at the time, but I did continue to work hard post course.

I was very happy that I went to the course and will recommend it to others.

**KV**

***Victoria Hospital, East Grinstead, United Kingdom***

The course at Cardiff was excellent, especially for anatomy preparation. The small teaching groups were very good, and the faculty were helpful. Thank you!

**MM**

***Wythenshawe Hospital, Manchester, United Kingdom***

I actually performed much better than expected, and I really think that it was down to the course I attended that you organised. There were a number of courses available as preparation for MRCS Part B, and in all honesty, I chose this one due to the convenience of the dates. However, after listening to feedback from friends who attended other courses and my own experience, I would make this choice again. I have already recommended this course to people I know who are preparing for the exam. This course made me feel so much more prepared and confident for the exam; it directed me to target my studies and know what to expect. Thank you very much. I am very grateful to all the faculty involved in putting on this course as it was extremely useful. I attended the whole course and would recommend it that way to others.

**RS**

***John Radcliffe Hospital, Oxford, United Kingdom***

I was successful in the examination. Looking at the breakdown of my performance, I was well above the average and the pass mark. I have to thank Professor Enoch and the team for their help and support. This has been entirely made possible because of all the hard work Professor Enoch has put into organising this course and helping us to prepare for the exam.

**SB**

***The Royal Wolverhampton NHS Trust, United Kingdom***



# DOCTORS ACADEMY

BETTER EDUCATION. BETTER HEALTH.

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
- International Academic and Research Conference
- World University Anatomy Challenge

## Publications



[publications.doctorsacademy.org](http://publications.doctorsacademy.org)

## World Journal of Medical Education & Research



Peer-reviewed academic journal  
with ISSN.

- No fee to view, read and download articles
- No subscription charges
- No submission fees
- No manuscript processing fee
- No publishing fee
- No cost to read, write or publish!

[wjmer.co.uk](http://wjmer.co.uk)

## 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 speciality exams.

### Resources for:

- Medical Students
- Dental Students
- International Entrance Exams
- MRCS Exams
- General Surgery Exams
- Plastic Surgery Exams
- DOHNS Exams

[www.doctorexams.co.uk](http://www.doctorexams.co.uk)

# [www.doctorsacademy.org](http://www.doctorsacademy.org)