

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

Feedback - January 2018

Cardiff MRCS OSCE: Applied Surgical Sciences & Critical Care

In the final part of the MRCS exam, surgical trainees are expected to have a good working knowledge of general physiological principles as well as 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 of the physiology of the respiratory, cardiovascular, renal, endocrine, gastrointestinal, and central nervous systems.

The interactive lectures were delivered in way which would help the candidates to answer the OSCE/viva stations in a structured, systematic and concise manner.

Course Information

Course date:	25th January 2018
Venue:	School of Biosciences, Cardiff University, Cardiff
Attendance:	39 Delegates
Aimed at:	Delegates looking to take their membership to the Royal College of Surgeons Part B exam.
Course fee:	£190.00



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

Topics:

- General physiological principles
- Acid-base imbalance (metabolic and respiratory acidosis/alkalosis) and their management
- Fluid balance and fluid replacement therapy
- Renal physiology
- Bleeding and coagulation
- Management of sepsis and septic shock
- Homeostasis and thermoregulation
- Hypothermia
- Principles of epidural anaesthesia
- Gastrointestinal system
- Cardiovascular system and critical care
- Endocrine physiology
- Neurophysiology and management of head injury
- Burns



Course Programme

0815 - 0825 **Registration**

MORNING SESSION

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

0830 - 0900 **General Physiological Principles 1 (Dr Paul Morgan)**

- Homeostasis, feedback loops
- Applied acid-base balance

0900 - 0930 **General Physiological Principles 2 (Dr Paul Morgan)**

- Sepsis
- Septic shock

0945 - 1100 **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

1100 - 1120

Coffee Break

1120 - 1200 **Management of Burns (Prof Stuart Enoch)**

- Assessment
- Pathophysiology and principles of management
- Inhalation burns
- Fluids and Nutrition
- Indications for referral

1200 - 1300 **Management of Trauma (Prof Stuart Enoch)**

- Principles of management
- Long bone fractures
- Compartment syndrome
- Intraabdominal trauma

11300 - 1340

Lunch Break

Course Programme

AFTERNOON SESSION

1345 - 1415 **General Physiological Principles 3 (Dr Paul Morgan)**

- Bleeding
- Coagulation/Anti-coagulation

1415 - 1445 **Resuscitation, Temperature Regulation, and Hypothermia (Dr Paul Morgan)**

1600 - 1620 **Coffee Break**

1445 - 1530 **Central nervous system (Dr Paul Morgan)**

- Cerebral autoregulation
- Causes and management of raised intra-cranial pressure including spaceoccupying lesions
- Head Injury

1530 - 1600 **Principles of Epidural Anaesthesia/Assessment; Pain pathways (Dr Paul Morgan)**

1600 - 1620 **Coffee Break**

1630 - 1650 **Rhabdomyolysis (Prof Stuart Enoch)**

1650 - 1745 **Short topics in Surgical Critical Care (Prof Stuart Enoch)**

- Calcium Metabolism
- Cardiac Physiology
- Spinal Cord Lesions
- General Physiology Topics

1745 - 1900 **Essentials of Microbiology (Prof Stuart Enoch)**

- Necrotising Fasciitis
- Tuberculosis
- Antibiotics and MoA

1900 - 1915 **Summary and Feedback**

END OF COURSE

Faculty List

Dr Paul Morgan, FRCA

Examiner - Royal College of Surgeons of England

Consultant Intensivist, Adult Critical Care

University Hospital of Wales, Cardiff

Professor Stuart Enoch, MB BS, PhD, PGCert (Med Sci), MRCSEd, MRCS (Eng)

Senior Lecturer; Director of Education & Research

Doctors Academy Group

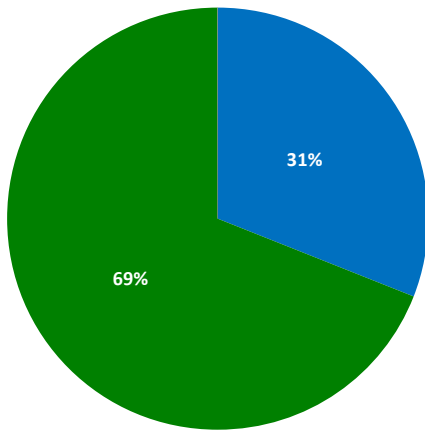
Dr Teresa Evans, FRCA

Consultant Anaesthetist

Royal Gwent Hospital, Newport

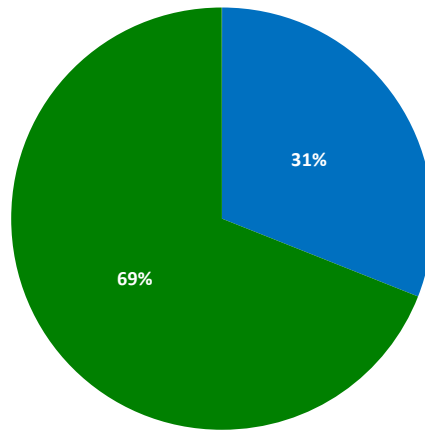
Overall Teaching Feedback

Was the content of the course:



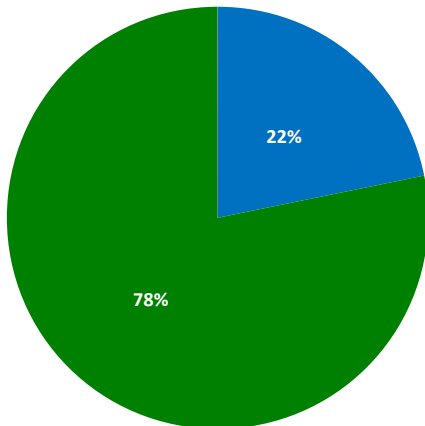
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

How was the clarity of presentations?



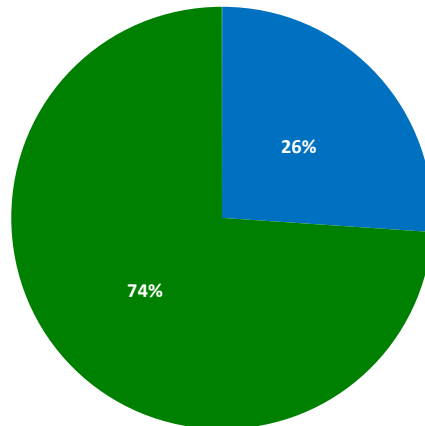
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

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



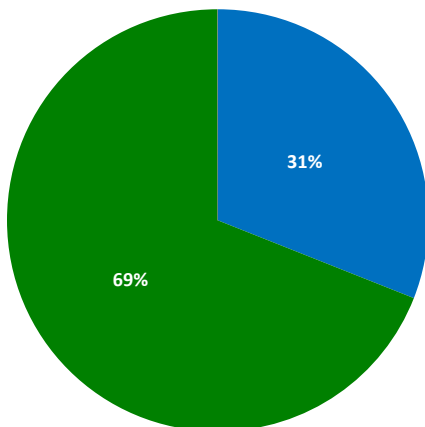
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

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



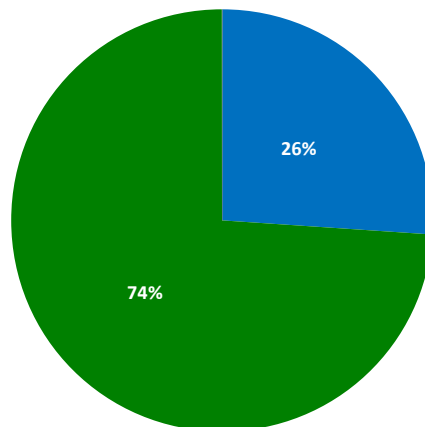
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Homeostasis, Feedback Loops



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

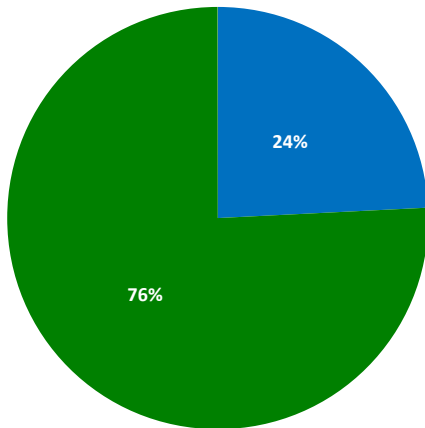
Applied Acid-Base Balance



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

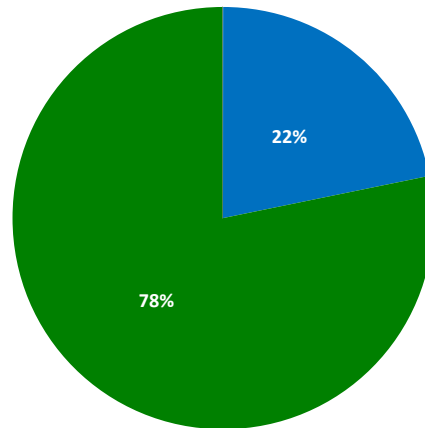
Overall Teaching Feedback

Sepsis



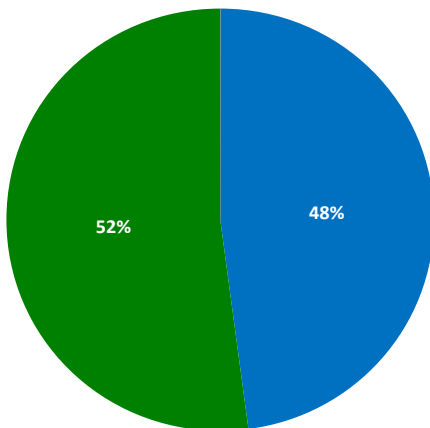
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Septic Shock



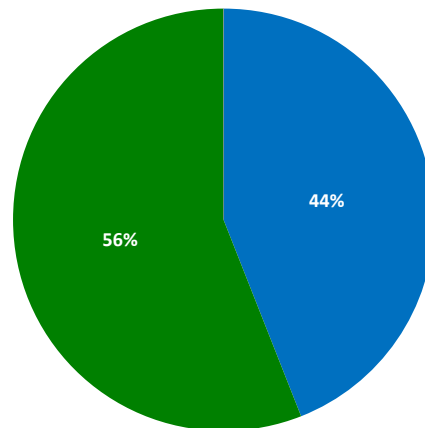
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Normal Ventilatory Cycle



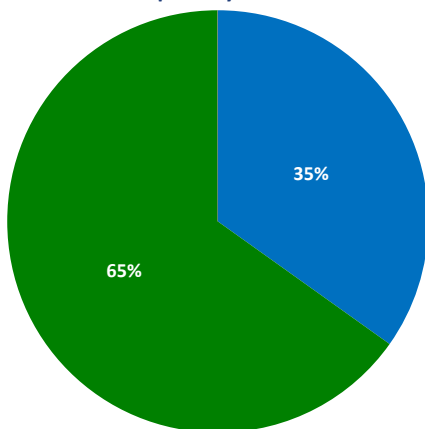
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Controls of Ventilation



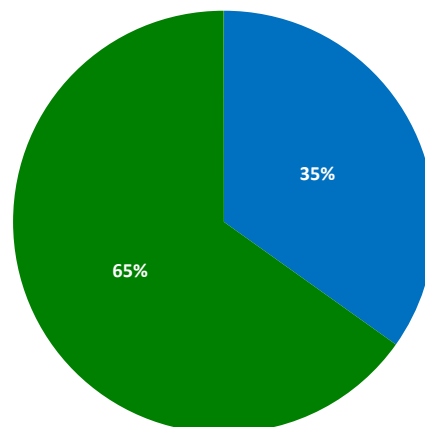
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Causes and Management of Post-operative Respiratory Failure



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

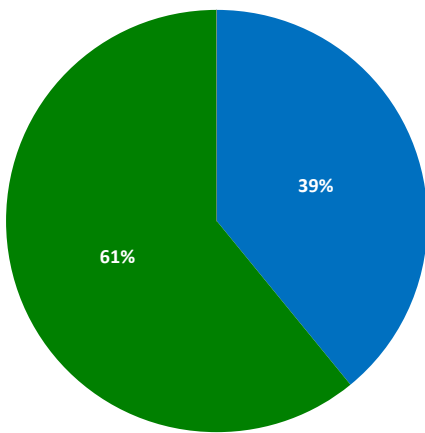
Indications for Ventilatory Support and Weaning off Ventilator



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

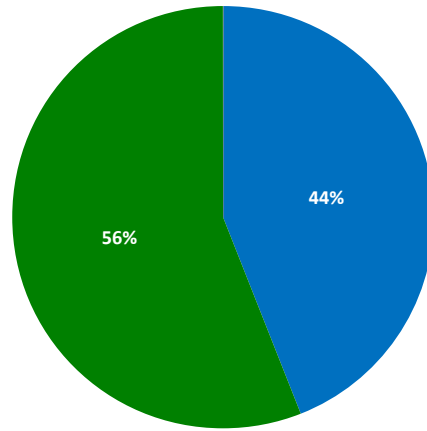
Overall Teaching Feedback

Intermittent Positive Pressure Ventilation



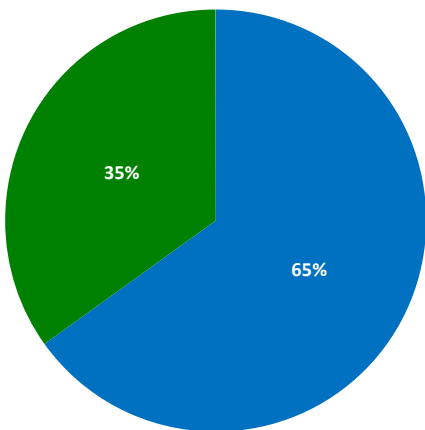
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Acute Respiratory Distress Syndrome



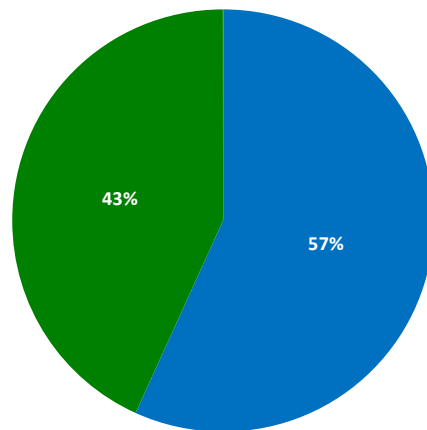
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Inhalation Burns



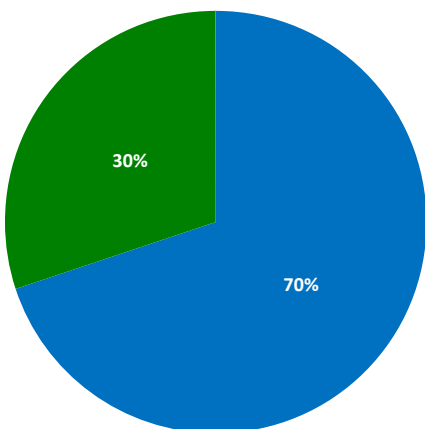
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Fluids and Nutrition in Burns



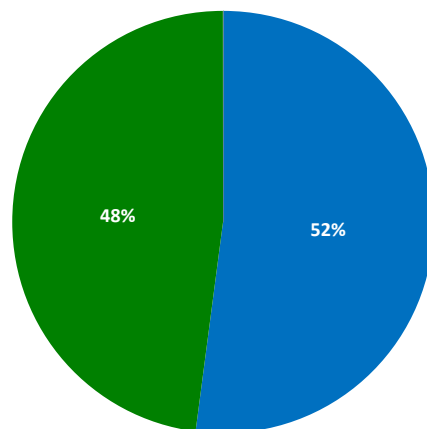
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Indications for Referral in Burns



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

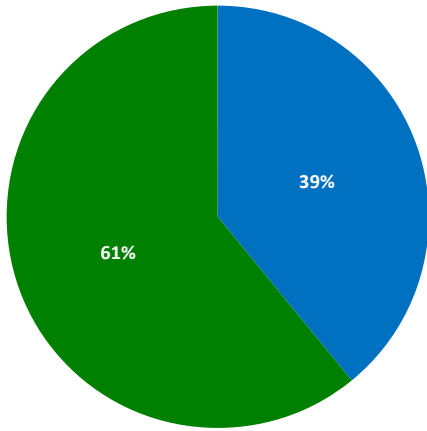
Principles of Management of femur



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

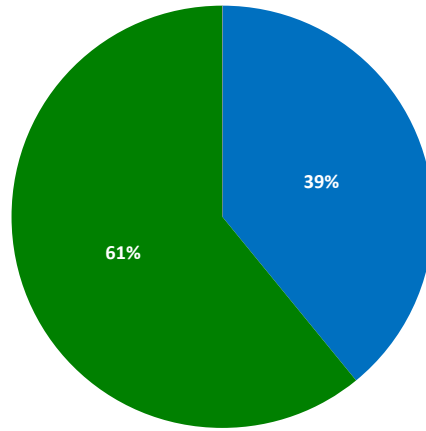
Overall Teaching Feedback

Long Bone Fractures



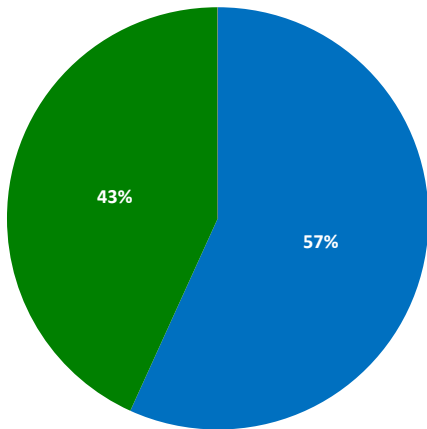
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Compartment Syndrome



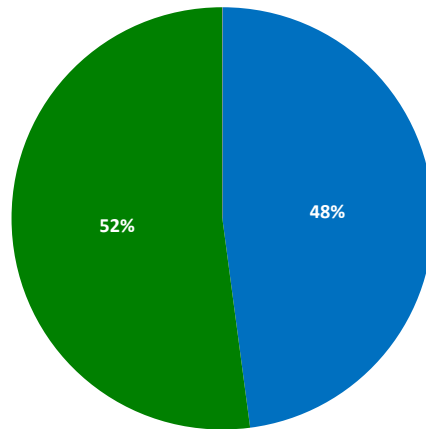
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Intraabdominal Trauma



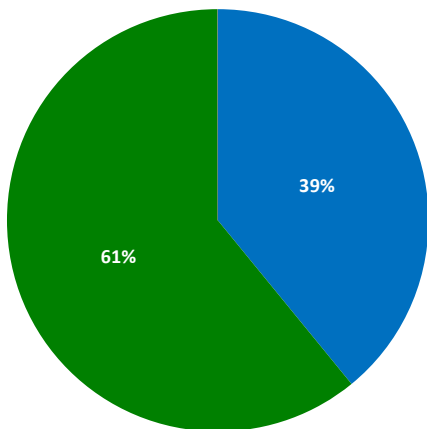
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Bleeding



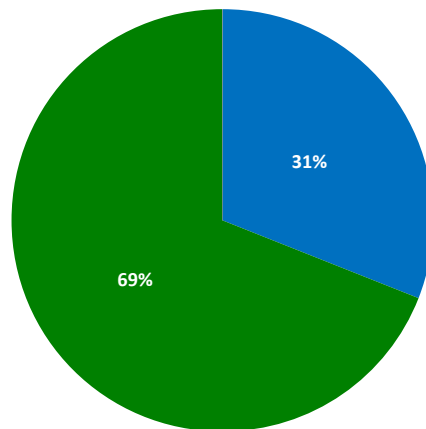
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Coagulation/Anti-coagulation



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

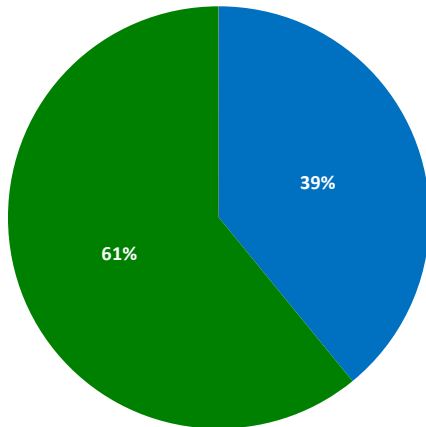
Resuscitation



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

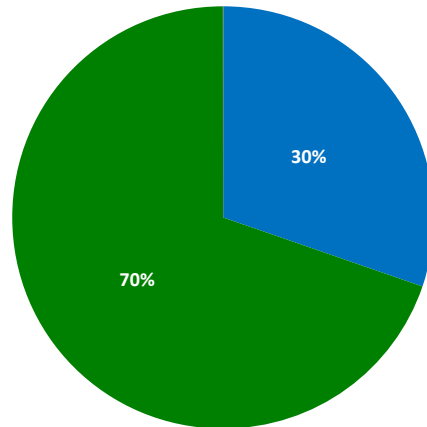
Overall Teaching Feedback

Temperature Regulation



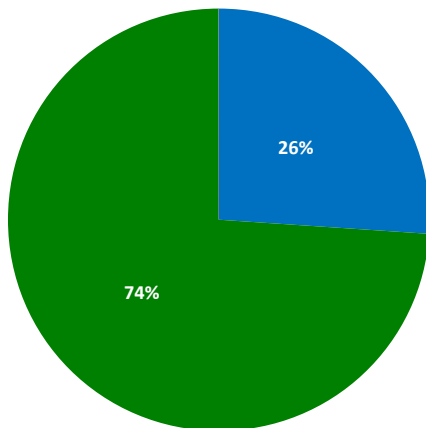
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Hypothermia



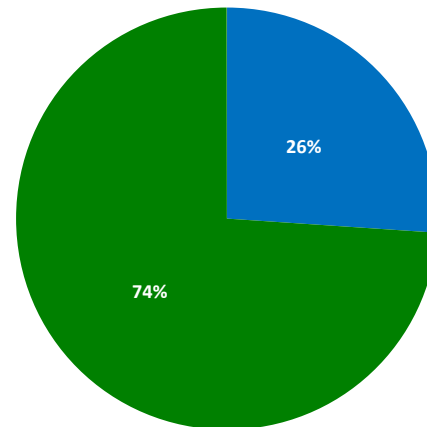
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Cerebral autoregulation



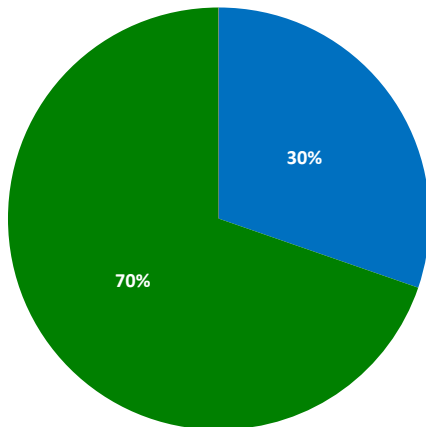
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Causes and Management of Raised Intra-cranial Pressure Including Spaceoccupying Lesions



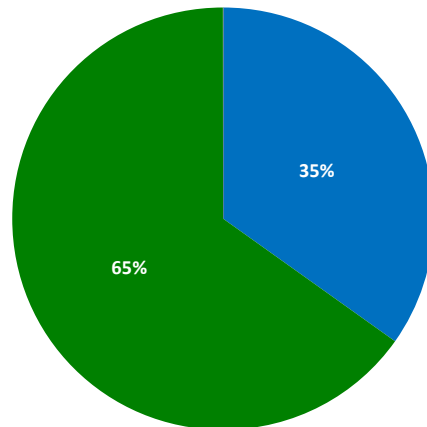
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Head Injury



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

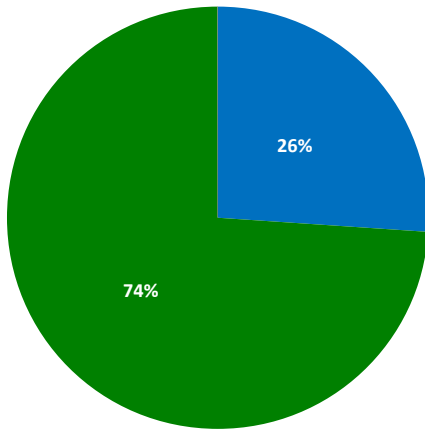
Principles of Epidural Anaesthesia/Assessment;Pain pathways



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

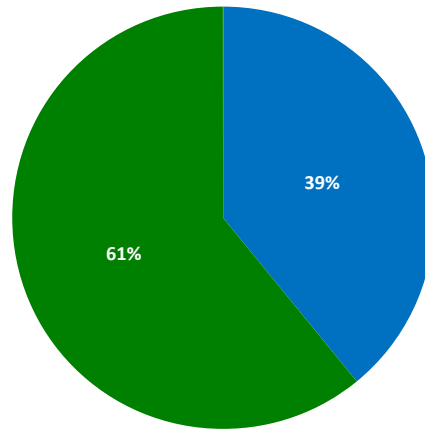
Overall Teaching Feedback

Rhabdomyolysis



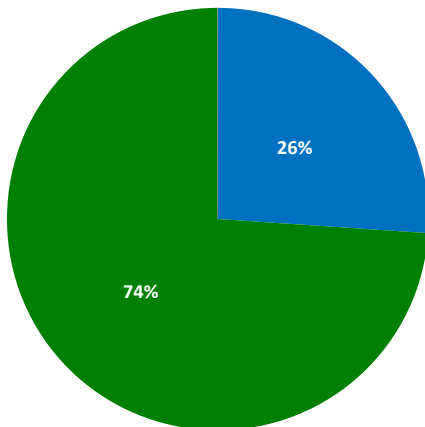
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Cardiac Physiology



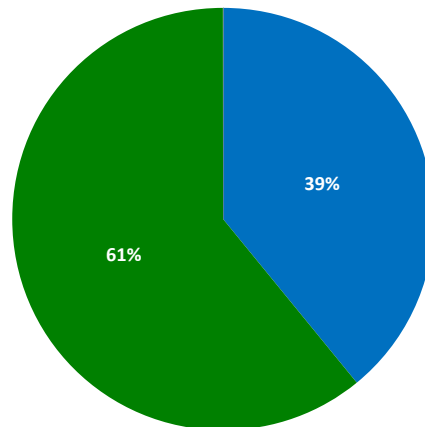
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Spinal Cord Lesions



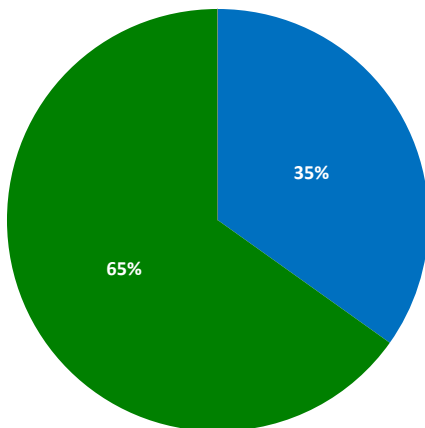
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

General Physiology Topics



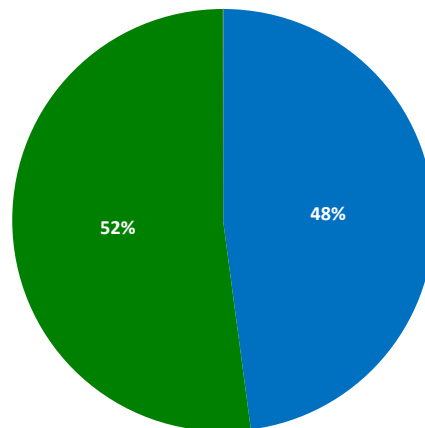
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Necrotising Fasciitis



■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

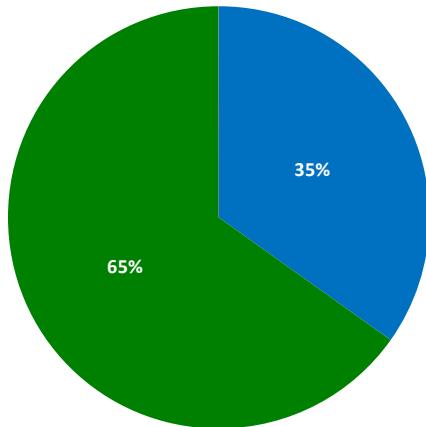
Tuberculosis



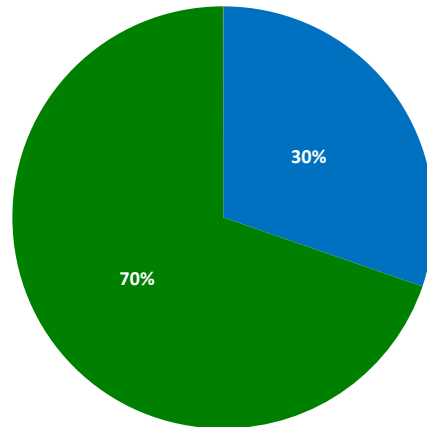
■ Excellent ■ Very good ■ Neutral ■ Fair ■ Poor

Overall Teaching Feedback

Would you recommend this course to a friend?

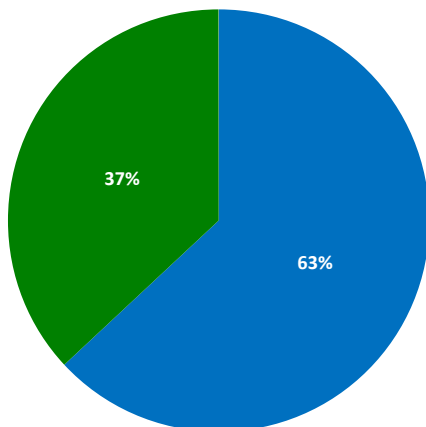


Do you think that this course provided good value for money?

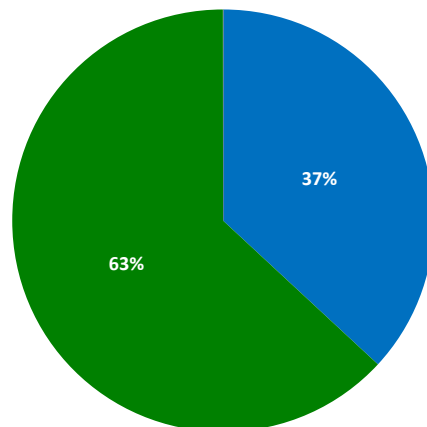


■ Most certainly ■ Certainly ■ Neutral ■ May be ■ Don't think so ■ Most certainly ■ Certainly ■ Neutral ■ May be ■ Don't think so

How were the facilities and venue?

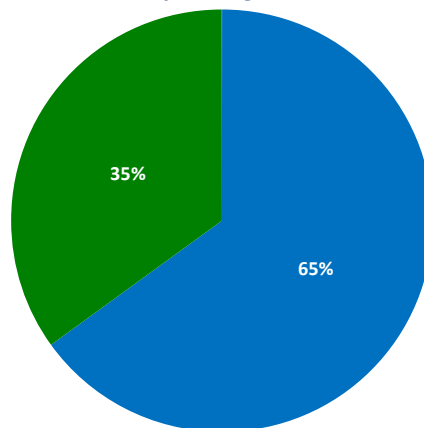


How were the refreshments and lunch?



■ Excellent ■ Good ■ Neutral ■ Fair ■ Poor ■ 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

Very Useful.

AM
Queen's Hospital, Romford

A long hard day but high yield stuff.

RH
Torbay District General Hospital, Torquay

Relevant.

AM
Queen's Hospital, Romford



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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, 6th to 10th August 2018
- **International Academic and Research Conference**
Manchester, 11th August 2018
- **World University Anatomy Challenge**
Manchester, 9th and 10th August 2018

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 speciality exams.

Resources for:

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

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