

Primary FRCA COURSE 2010–2011

The Primary FRCA syllabus is encompassed in detail in the Competency-based ST Training and Assessment Manual produced by the Royal College of Anaesthetists.

The North West School of Anaesthesia will provide a supportive educational framework for this curriculum by ensuring:

Primary FRCA Tutorials:

The Primary FRCA Tutorials are totally independent of the Primary FRCA Course and are:

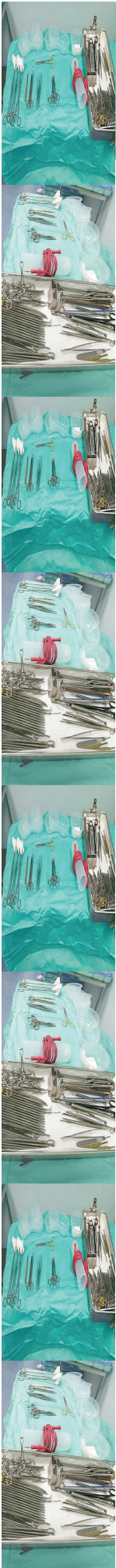
- Based in individual ST Schools
- Protected time
- Weekly tutorials in 'term-time' - programmes on website

Primary FRCA Course:

- Distance learning course to supplement personal study
- Centralised blocks of seminars, tutorials and small group work
- Examination-orientated study
- Examination practice days as a separate module to be undertaken when ready to sit the Exam
- Issued with a book 'How to Pass the Primary FRCA Exam'
- Cover the basics of anaesthetic practice
- ACCS tutorial programmes — details on website
- Course content is regularly reviewed and updated in line with the Royal College of Anaesthetists' guidance

General Structure:

- The course is designed for all core trainees in the North West region planning a career in Anaesthesia, such as CT1/2 or StR2 trainees in Anaesthesia, and ACCS, CT2 or StR2 trainees destined to enter Anaesthesia.
- Commencement on the course should be discussed with and approved by the relevant RCOA College Tutor .
- **August** starters are expected to attend the November Study block after completing the Introductory Tutorial Programme.
February starters should attend the first available 2 day Study Block after completing their starter tutorials.
- **ACCS** Trainees destined to enter Anaesthesia should enrol on the course as soon as possible on commencement of Year 2 of their ACCS training. The course is not recommended for ACCS trainees destined for specialities other than Anaesthesia.
- Centralised programme to allow Trainees from all 3 schools to meet on one site. Different hospitals in the Region will host the Study units.
- Stand-alone Examination Practice days to be undertaken **immediately prior** to sitting the Examination.



General Structure: (continued)

- Teaching consists of 9 (2 day) Study Blocks. It is envisaged that trainees will attend all of them during their period of CT or StR training in Anaesthesia. Repeat attendance is permitted and must be advised to the Administrator of the Primary FRCA Course, giving at least 4 weeks' notice.
- Additional 4 Study days in ICM, Obstetrics, Transfer and SIMMAN training. Doctors are expected to register and attend each of these 4 days during their 2 years. The RCOA Tutors approval is required to ensure attendance at an appropriate time. Capacity is limited on some of these days, but several dates will be available during the 2 years.
- The 9 Study Blocks and 4 Training days are designed to provide a complementary programme to ensure Trainees are able to sit the Primary Exam at 15 months and achieve the level of training to complete the requirements of ST1-2 training as recommended by the Royal College and Training Committee.

The structure of the Primary FRCA Course will vary but will include MCQ Practice, topic presentations, group work and discussions. The course is designed to act as a distance-learning group. Participants will be expected to have studied the subject matter using textbooks, journals etc, prior to the Study Days. The purpose of these days is to consolidate previous private study and to promote understanding by exploring more difficult concepts.

MCQ Exam Practice Days:

The Exam Practice Days comprise of a 3-day course prior to the written paper and will concentrate on the MCQ paper. It will include mock examinations, analysis and feedback on knowledge and technique. MCQ Exam Practice days are part of the Primary FRCA Course Fees. Re-attendance is permitted if a trainee fails the Exam.

OSCE/SOE Exam Practice Days:

The 2-day course prior to the clinical examination will concentrate on OSCE and SOE technique. It will include mock OSCE examinations. VIVAs and individual and group sessions for feedback and advice.

Attendance/Non-Attendance:

In order that administrative arrangements can be finalised within a reasonable timescale, it is important to note the following regarding attendance at the Primary FRCA Course.

- Non-attendance must be advised, i.e. annual leave, sickness etc in order that registers can be amended and College/Course Tutors are aware of who to expect at their courses.
- In order to maximise the benefit, trainees are asked to try and arrange to not be 'on-call' the night before or on the first night of the course.
- A register will be kept and attendance will be monitored by the College Tutors.

Evaluation forms are available to allow modification of future courses to ensure that the content is appropriate, relevant and exam-orientated and the North West Anaesthesia Course Facilitators would appreciate that trainees complete these at each Study day/Exam Practice day sessions before leaving.

Primary FRCA Course Syllabus and Dates:

The syllabus for the Primary Course and the calendar dates for all Study Day Blocks and Exam Practice days are posted to the North West School of Anaesthesia Homepage of the North Western Deanery website www.nwpgmd.nhs.uk. Other Courses which may be of interest to trainees can also be found on the website which is updated on a regular basis.

The website should be checked regularly for updates and information.

Any trainee wishing to attend the Primary FRCA Course must register prior to any attendance of any Study.

The Primary FRCA Course is a rolling programme & comprises of 9 Study Day Blocks and Exam Practice Days for MCQ Examination & OSCE/SOE Examination. Attendance of all 9 Blocks to be completed over the 2 year period is required.

Study Days:

Fees payable are as follows to attend the Primary FRCA Study Days during ST1-2 years:

- **Initial registration should be completed in August, fees of £500.00 are payable to cover the cost of attending and will be deducted from your Annual Budget allowance by the North Western Deanery in Year 1 and Year 2. The annual entitlement is currently £805.**

Study Days (9 in total of 2 days)

MCQ Exam Practice Days (3 days).

In addition, attendance at the ICU, Obstetric, Critical Incident Course, Transfer Course, and Airways Study Day are included in the Primary FRCA Course fees.

- Registration to join the Primary FRCA Course must occur via the online registration form on the North West School of Anaesthesia Homepage of the North Western Deanery. Please visit — www.nwpgmd.nhs.uk and log-in to the School of Anaesthesia Section
- Once the online registration form has been submitted, confirmation of registration will be by email.

Exam Practice Days:

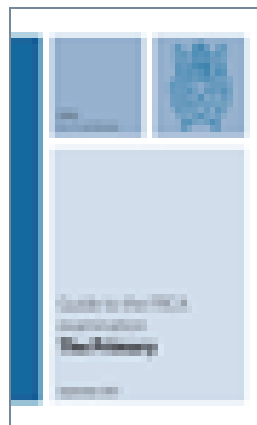
Fees payable are as follows to attend the Primary FRCA Exam Practice Days:

OSCE/SOE Exam Practice Days £250.00 These fees only apply to Trainees who joined the Primary FRCA Course in August 2009 and External applicants only.

MCQ Exam Practice (3 days) £150.00 These fees apply to External applicants only

As trainees will take the Exam at varying times, separate registration is required to attend all Exam Practice Days. Registration is via the online registration form on the School website.

Trainees can only attend Exam Practice Days once their application for the Exam has been accepted by the College. Registration to attend the Exam Practice days must be done at least 5 weeks prior to the dates of the courses. The cut-off date for trainees registering for the Exam Practice days is 3 weeks prior to the date and late registration will no longer be accepted unless there is a valid reason. Any extremely late registration must be advised to the College Tutor who will sanction attendance can be permitted. Registration is required in order to re-attend any Exam Practice Course.



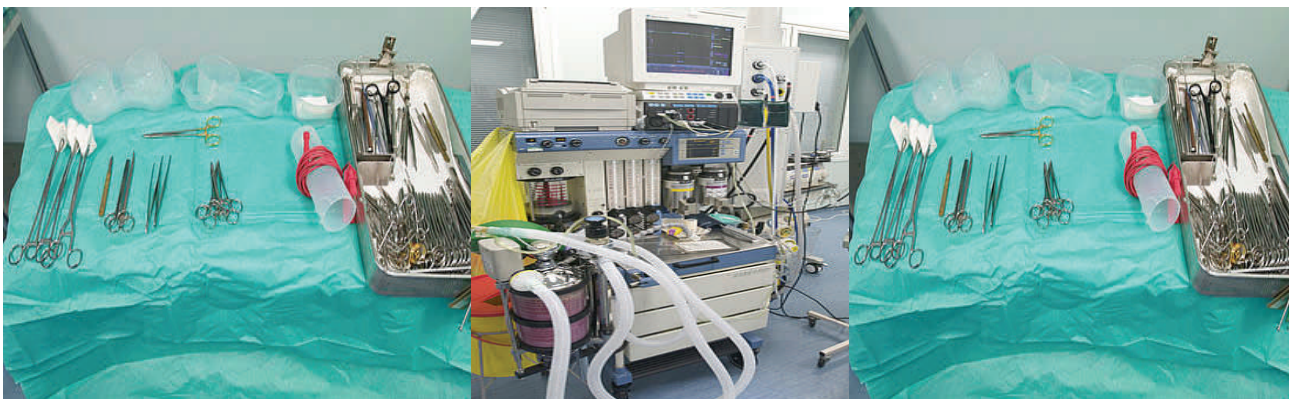
Other Courses:

In addition to attendance at the Primary FRCA Course, trainees are expected to attend the following additional Courses provided by North West Anaesthesia. Certificates of attendance will be awarded for CPD files during either Years 1 or 2

- Attendance at 1 Basic Obstetric Course. This course should be attended when in Year 2 and before/working in Maternity On-call.
- Attend one of the 4 ICM Courses. This course should be attended when doing the ICU Module.
- Attend a 1 day Critical Incident Training Day/SIMMAN. This course should be attended prior to doing the OSCE/SOE Exam Practice.
- Patient Transfer Course. This course should be attended during the first year/before being On-Call.
- Airways Study Day

Registration details and dates for these courses are on the North West School of Anaesthesia homepage of the North Western Deanery website www.nwpgmd.nhs.uk. Trainees must book suitable dates and register accordingly as each course has limited capacity.

These courses are part of the Primary FRCA Course fees paid and this should be advised to the respective Course Co-Ordinators when registering.



PRIMARY FRCA COURSE SYLLABUS

The topics listed will be taught in the respective
2 day Study Day Blocks for that month.
Pre-course reading is required for each Month's
Workshops.

November:

How to pass the Primary

Physics & equipment: Anaesthetic machine & breathing systems/Cylinders, pipelines & gases/
Suction & scavenging/Heat & monitoring temperature/Humidity

Renal physiology/Fluids & electrolytes & dehydration

Emergency anaesthesia and trauma (including CEPOD classification, regurgitation & aspiration &
rapid sequence anaesthesia with cricoid

December:

Physics of gases, Capnography and pulse oximetry. Measurement of gas
concentrations. Principles of anaesthetic machine, pressure regulators, flow meters,
Vaporizers, breathing systems. Absorption of carbon dioxide. Implications to anaesthesia of
respiratory diseases. CXRs, Pulm. Function.
Induction techniques. Pacemakers/defib

January:

Physics of humidity and measurement.

Basic measurement concepts – linearity, drift, hysteresis, signal:noise ratio, dynamic response.

Interpretation of blood gases

Blood Gas Machines

Basic Science of Obstetric anaesthesia

Physiology & Pharmacology of the placenta & foetal circulation

Spinals and epidurals.

Modes of action of drugs

February:

Monitoring the cardiovascular system

Minimum monitoring

Basic concepts of electricity and magnetism

Capacitance, inductance, impedance

Amplifiers, filters, amplification of biological potentials

Sources of interference

Processing, storage and display of physiological measurements

Principles of lasers

Principles of pressure transducers, resonance, damping, frequency response.

Measurement of blood pressure

Cardiovascular Pharmacology & Physiology

Cardiac anatomy & coronary circulation

March:

Cross infection, antibiotic resistance, general precautions
Sterilization of equipment, also single use equipment/ nvCJD
Common surgical infection: antibiotic choice and prophylaxis
Hepatitis/ HIV: infection modes, natural history, at risk groups, needlestick

Physiology 1: receptors and neurotransmitters
Anatomy/ physiol 2: PNS/ CNS transmission, gate theory, descending inhibition
Pharmacology of drugs used in pain management
assessment/ measurement. The acute pain service

NM physiology
NM pharmacology
NM assesment
Muscles: fibre type, strucure, contraction. Dantrolene

Drug delivery, absorption
Drug distribution/ clearance: mathematic models
pKa, lipsd solubility, protein binding and relevant interactions
Drug metabolism and interactions effecting

April:

Function and use of related equipment – airways, tracheal tubes, laryngeal masks, oxygen therapy equipment, transfusion devices
Implication, diagnosis and management of sickle cell disease, anaemia
Immunology – immunity and allergy, inflammatory response, blood groups
Blood – cells, clotting
Blood transfusion and intravenous fluids
Intra-and post-op fluid management
Prevention thromboembolic phenomena
Positioning
Obesity and anaesthesia
Doppler effect and the use of Doppler ultrasound devices.
Intra-op fluids & IV Fluids.

May:

Anaesthetic records and critical incidents.
Endocrine diseases and anaesthesia – diabetes, thyroid disease, pituitary, adrenals, - physiology and pharmacology
Premedication. Physiology of nervous system.
Principles of anaesthesia for neurosurgical procedures
Anatomy of nervous system
Laparoscopy
Regional blocks & eyes, LA Tox

June:

Physiology of liver and metabolism, anaesthesia and the liver
Physiology of gastrointestinal system
Anatomy – areas of special interest (base of skull, thoracic inlet, 1st rib, intercostal and paravertebral space, abdominal wall, antecubital fossa, large veins of neck, leg, diaphragm, tracheostomy, cricothyroid, eye, axilla)
Trauma patients – anaesthetic implications
Statistics: data collection, descriptive statistics, inferential statistics

July:

Measurement of volume and flow in gases and liquids. Principles of lung ventilators, disconnection monitors
Respiratory physiology and pharmacology
Assessment of airway, anatomy of reps. system
Indications for intubation
Depth of anaesthesia and awareness
Post-op nausea and vomiting (mechanisms, prevention and treatment)
Principles of the care of children
How to pass OSCE/SOE

PRIMARY FRCA EXAM PRACTICE COURSES

MCQ Exam Practice Days - 3 days

OSCE/VIVA Exam Practice Days - 2 days

If you have any queries relating to the Primary FRCA Course
please contact Janet Coulson

email to nwanaesthesia@aol.com

or by
(07517 456 401)

Please only register to attend Exam Practice Days if you are sitting the Exam the following month and your application has been accepted by the College.

Each Exam Practice Course must be registered for separately and at least **4 weeks prior to the Course.**

These days are supported by the Consultants and Senior SpRs in the North West region who volunteer their time to teach and it is imperative that we have a sufficient number of Trainers available each day to ensure that the high standard and quality of training delivered to you is not compromised. **Your co-operation to register promptly would therefore be appreciated to assist the administrative organisation of these days as late registration will not be permitted.**

Attendance:

Please ensure as far as possible that known non-attendance of any course is advised in good time, i.e. annual leave. In the event of any sickness on any day, please advise Janet Coulson by email to nwanaesthesia@aol.com

Please note that Departments will be advised of non-attendance on the day.

