

# EMS AND BRISTOL UNIVERSITY

## OUTLINE CURRICULA OF CLINICAL COURSE

YEAR	UNIT	COURSE CONTENT
Clinical Year one THIRD	Microbiology Pharmacology & Therapeutics Pathology (extends over years 3 and 4)  Basic Clinical Science   Farm Animal Science   Companion Animal Studies   Veterinary Public Health	Pathophysiology of Disease and Fluid Therapy Surgical Biology and Basic Surgical Techniques Clinical Pathology Anaesthesia Communication skills Research Training in Veterinary Science  Small ruminant medicine Poultry nutrition and medicine Housing and the relationship between production and disease Introduction to reproduction  Diagnostic imaging Small animal reproduction/obstetrics  Introduction to State Veterinary Medicine Miscellaneous Legislation Concerning Animals Including Man: Notifiable diseases, Zoonoses and food poisoning
Clinical Year two FOURTH	Companion Animal Science (Small animals and Equine species)      Farm Animal Science      Veterinary Public Health	Soft tissue surgery (dog and cat) Internal medicine (dog and cat) Small animal clinical nutrition Diagnostic imaging Soft tissue surgery (all species) Large animal cardiology (predominantly equine) Orthopaedics (large and small animals) Equine medicine ENT (large and small animals) Ophthalmology (large and small animals) Dermatology (large and small animals) Exotic species (wild birds, reptiles and laboratory animals) Communication skills  Pig nutrition and medicine Diseases of ruminants Ruminant nutrition Pasture management (incl. parasite control) Production and the relationship between production and disease  Animal Health and Welfare and Food Hygiene and Safety: Red and white meat / Eggs and egg products / Milk hygiene / Residues in foods of animal origin / Water supplies / Laboratories in food hygiene / Diseases associated with food handling and food poisoning / Disinfection and sterilisation. II) / Medicines and drugs / Health and safety at work / Laws concerning animals / Waste disposal and pollution control.
Clinical Year three FIFTH Year	Lecture free  Intramural core clinical rotations   Additional choice clerking rotation    Electives	Anaesthesia Equine studies including first opinion practice and equine imaging Farm Animal studies ( double station) including first opinion practice, reproduction and VPH Feline Medicine/Dermatology /Clinical Pathology/Pathology Canine Internal Medicine and intensive care Small animal surgery and imaging Small Animal First opinion practice & PDSA All students undertake three ( six in Farm animals ) weeks in each of these stations plus an additional three week additional rotation in area of their choice  Further three week elective, choice in any of stations above plus avian medicine, communication skills, behavioural medicine, dermatology, imaging and a research elective

YEAR	SMALL ANIMAL	LARGE ANIMAL (CATTLE / PIGS / SHEEP)	EQUINE
THIRD	History taking Handling and restraint Measuring/recording temperature, respiration, pulse and heart rate Injections - s/c, i/m Vaccination procedure Oral administration of drugs Skin scraping Nail clipping Bandaging procedures Expression of anal sacs	History taking Handling and restraint Condition scoring Measuring/recording temperature, respiration, pulse and heart rate Herd TB testing Injections - s/c, i/m Oral administration of drugs Intra-mammary administration of drugs Udder check / California milk test Tail docking lambs and local anaesthetic techniques Castration of lambs using local analgesia Disbudding calves using local analgesia	History taking Handling and restraint Measuring/recording temperature, respiration, pulse and heart rate Ageing by dentition Injections - s/c, i/m Vaccination procedure
FOURTH	Blood sampling Injections - i/v Setting up / supervision of drips Euthanasia Suturing skin / removal of sutures Limb fracture - splint/application of cast Tooth scaling and polishing Urinary catheterisation Radiography Endotracheal intubation Inhalation/intravenous anaesthesia	Blood sampling Injections i/v Disbudding calves including local analgesia Rectal examination of cows Foot trimming and paring Rumen trocharisation and oesophageal/rumen intubation of cattle Uterine irrigation of cattle Abortion procedures cattle Castration - calves/piglets/ using local anaesthetic techniques Stomach intubation of lambs	Blood sampling Shoe removal / paring foot Tooth rasping Injections - i/v Lameness examination Clinical Examination of the neonate
FIFTH	Soft tissue surgery incl. spay/castrate Management of dystocia Dental surgery Limb fracture - internal fixation Certification / exportation procedures	Herd infertility analysis Ultrasound in pregnancy diagnosis Dystocia - cow / ewe / sow Caesarian operation Vaginal/uterine prolapse - cow / ewe Dehorning cattle and local anaesthetic techniques Amputation of digit and local anaesthetic techniques Applying foot block Ringing bull Paravertebral / epidural anaesthesia in cattle Teat surgery Certification for casualty slaughter	Nerve blocks in lameness examination Swabbing for CEM Wolf tooth removal Radiography of the lower limb Nasogastric intubation Bronchoalveolar lavage Abdominocentesis Urethral catheterisation (male/female) Endoscopy Castration Euthanasia Examination for insurance Purchase examination Rectal examination (colic/PD/urogenital)

## AN OVERVIEW OF THE MANAGEMENT OF EMS AT BRISTOL

The 26 week clinical EMS programme at Bristol is devised so as to provide a continuous core of experience gained in a familiar practice environment, designated the "Base" or "Foster" practice, complemented by placements in one or more specialised practices and areas.

The aim is to place most students in their Base practice for a maximum of 15 weeks, with a further 7 weeks specialised placements and three weeks spent undertaking EMS within the small animal and equine clinics at the Veterinary School. Placements for less than two weeks are not permitted except in the Base practice or in certain exceptional circumstances agreed with the EMS office. Currently, as Bristol operates a 30 week teaching final year, nearly all EMS takes place during vacations. This is under review and may change.

Students commence their clinical EMS in the Easter of year 3, following up with a further period in the summer vacation. Initially six weeks of 'preparatory EMS' ("seeing practice") are conducted at up to three practices tailored to give a broad experience of equine, farm and small animal practice. Students are provided with a manual to guide them and they are expected to keep a

learning diary plus a techniques log. Signed certificates are required from each placement for each week. Currently these reports are paper based, but an online system of monitoring student progress and an online portfolio that can be kept by the student is available.

Potential placements are initially discussed in year two. Practice selection is made by the student in conjunction with the EMS office using information from the student about practices in their home locality, from our own foster practice data base, from the RCVS Register of Practices and online Find-a-Vet facility < <http://www.rcvs.org.uk/FindAVet> > and from personal recommendation. One of these preparatory EMS practices will become the Base practice. Mixed practices are preferred, but base practices must meet minimum requirements concerning numbers of vets and range of species. The School makes the request to the practice(s) and if they agree the student is then expected to visit the practice(s) in the Easter vacation of year two to introduce themselves. A liaison person at the practice(s) is(are) identified and sent relevant extracts from the EMS manual.

After the six-week third year placement(s) the EMS liaison person at each practice provides the School with an assessment of the student's capabilities and performance. These reports are checked by the EMS co-ordinator who discusses any issues raised with the individual student. In addition, currently the student will undertake 5 days abattoir EMS placements during the summer of year 3. This requirement will change by 2012 to incorporate abattoir work within the core Veterinary Public Health teaching, although additional VPH EMS as part of the 26 week clinical EMS programme will be encouraged.

At the start of year 4 all students submit written feedback on their EMS and are interviewed by the Clinical EMS co-ordinator and the EMS Administrator to review the experience gained at their base practice and to plan their future complementary placements (e.g. specialised equine, farm animal or small animal or diagnostic lab, GVS, VLA or research placements), which will take place over the vacations during their 4<sup>th</sup> and 5<sup>th</sup> years. Each student has a personal tutor who also monitors the student's progress during meetings in years 4 and 5 so that any deficiencies can be identified. At the end of the Easter vacation of year 5, base practices are again asked to provide a report of the student's performance so that progress is assessed. Reports are also sought from each specialised placement.

Students are not allowed to proceed to their final examinations unless they have completed 26 weeks of certified clinical EMS.

## **SUMMARY OF INSURANCE COVER PROVIDED BY BRISTOL UNIVERSITY**

### **Extract from student handbook**

#### **Public Liability**

The University's Public Liability Policy provides an indemnity against legal liability for damages and claimants' costs and expenses in respect of accidental bodily injury, death, disease or illness or damage to property in connection with the University's activities. This includes extramural experience being gained as part of the course. This insurance provides:

An indemnity to students engaged in any activity of the University. So in the unlikely event you are held legally liable in respect of accidental injury, or damage to property (including animals) arising from your extramural placement, the University policy will extend to protect you.

#### **Please note that this is a legal liability policy only**

In order the University's Public liability insurance remains valid, it is essential that all your EMS placements are pre-arranged by, and known to, the Administration Office.

This policy does not provide students with any set benefits for death or injury during EMS when the University is not legally liable. For this you will need to arrange your own personal accident and sickness insurance.

Restricted personal accident insurance is provided by the BVA to all student members. This only covers accidents during the course of your studies or EMS placement (i.e. it is not a 24 hour protection), and does not include any cover in respect of temporary disabilities or sickness. Details can be found on the student pages of the BVA Members web site (*The university is currently reviewing whether to arrange block membership on behalf of all clinical students*).

### **Professional Negligence**

(Also called "Malpractice", "Professional Indemnity" or "Errors & Omissions" insurance)

There is no need for you to have this protection in the UK since any tests, treatment or surgical operations on animals by veterinary students must be under the direction and supervision of a registered veterinary surgeon (see RCVS regulations governing students in EMS placements). Any errors you make are ultimately be the responsibility of the supervising veterinary surgeon and therefore a matter for his/her insurance.

However, this is not necessarily the case outside the UK- it is not possible for either students, or the University on behalf of students to insure this risk within the UK. You must ensure that the Student Administration Office is made aware of any plans you have for EMS abroad, in good time before the placement starts. In particular it is very likely that Professional negligence insurance will be required in the USA and Canada and we cannot arrange this. On occasion, placement providers are prepared to waive this insurance requirement but you must allow ample time for the University to negotiate this with the placement provider. In the event of a waiver not being negotiated you may not undertake the placement.