On this course you will learn:
• Determine the neuroanatomical localisation of a lesion.
• Perform and interpret a full neurological examination.
• Include current thinking regarding the pathophysiology of disease, diagnosis and treatment, to discuss diagnosis, management and prognosis of selected canine and feline neurological diseases.

An innovative mix of print and online tools including case material will help you maximise your learning, alongside lecturer-facilitated online class discussion.

Whether you want to work towards a qualification or simply complete individual courses, the flexibility of Massey University’s distance learning courses help take your practice to the next level, in your own time.

Course number
118.756

Credits
15 credit paper in the Master of Veterinary Medicine programme

Course features
In-depth part-time study spread over 8 months

Learning materials and facilities
• Study guide
• Self-assessed activities
• Electronic library access
• 3 day workshop: face-to-face or an online option for some sessions

Learning community
• Online case discussion
• Social forum

Assessment
• 3 Neurology case reports
• Final exam online

Course requirements
• Internet access
• Textbook

Cost in your currency
• Australian dollars approx $4635*
• UK pounds approx £3020*
• Canadian dollars approx $4799*
• US dollars approx $4787*  

* Please note, all prices are approximate based on recent exchange rates and are quoted excluding Goods and Services Tax which is refunded to students living offshore. Additional non-tuition fees also apply which vary from NZD$195-231 depending on where you live.

Revised March 2013.
CANINE AND FELINE NEUROLOGY

Welcome to 118.756 Canine and Feline Neurology

Halloooo!

We have done our best to design a course that starts by giving you a good grounding in neuroanatomy and lesion localisation. Our aims (Chris Thomson) for part one of the course are:

1. to help you understand and apply “The NeuroMap” a basic wiring diagram for the nervous system
2. provide you with a conceptual and applied knowledge of the components of the neurological examination and
3. facilitate you to advance your skills in the performance and interpretation of the neuro exam.

With this information you should be in a good position to examine the weird and wonderful (both animal species and unusual diseases) from first principles. Remember recognising those neuro functions that are normal are just as important as recognising those which are abnormal in localising the lesion!

Part two of the course (Chris Mariani) will cover key disease mechanisms, diagnostics and therapeutics utilising neuro case material covering a broad range of diseases.

Our goal is to create an effective learning environment shared between you, your fellow students and ourselves, the instructors. Together we will work through practical, real-life cases and clinical problems to try and eliminate the fear and anxiety often associated with these cases and to improve your skill set in managing these patients. We look forward to having a laugh, some fun and getting down to tin tacks neuro over the next few months.

Best wishes.
Chris and Chris

OVERVIEW OF THE COURSE

Having completed this paper, you will have built on knowledge obtained in the BVSc (or equivalent) to gain advanced knowledge of the principles of neurology in dogs and cats, including neuroanatomy, neuro-anatomic localization, and diagnosis and management of diseases of the nervous system.

Topics covered

Module 1: Neurolocalisation

- Basis of the neurological examination
- Overview of the structure of the nervous system
- Overview of the function of the nervous system (hierarchical organisation)
- Behaviour, arousal and motor function
- Proprioception and sensory systems, nociception
- Vestibular function, posture and movement
- Cranial nerves
- Autonomic nervous system
- Functional road map of the nervous system
- Cerebellar function
Module 2: Mechanisms of neurological dysfunction
- Primary/secondary injury, oedema, ICP
- Compressive & obstructive disease
- Degenerative & anomalous disease
- CNS blood flow & metabolism
- Imbalances neuronal excitation & inhibition
- Inflammatory & infectious disease

Module 3: Principles of diagnosis
- Correlating signalment & clinical signs
- Neuroimaging
- CSF analysis
- Electrodiagnostics & biopsy

Module 4: Principles of therapy
- Blood brain barrier, antimicrobials
- Therapy for oedema, ICP, oxidative injury
- Therapy for compressive & obstructive disease
- Interfering with neuronal hyperexcitability, anticonvulsants, analgesia
- Anti-inflammatory, immunosuppressive & anti-neoplastic therapy

LEARNING MATERIALS

There are several different forms of self-study material you need to use for this paper. Each is explained in more detail in this administration guide.

**Administration guide**
Administrative information, information about assessments and how the course works

**Study guide**
Guide to your study and explains what to read at which points in the course

**Textbook**
The textbooks provide core reading for this paper

**Part one:** Veterinary Neuroanatomy, A Clinical Approach
Christine Thomson and Caroline Hahn, Saunders, 2012
ISBN: 9780702034824

**Part two:** BSAVA Manual of Canine and Feline Neurology, 4th edition
Edited by Simon R Platt and Natasha J Olby
Published Cheltenham: British Small Animal Veterinary Association, 2013
ISBN 978 1 905319 34 3

**Stream class website**
Online classroom for interactions with the rest of the class and provision of electronic learning materials

**Contact course**
An optional 3 days of face-to-face teaching

**Assessments**
Two neurological reports and one final exam held online