



**UNSW**  
AUSTRALIA

Medical Sciences  
Medicine

# **Frontiers in Neuroscience**

## **GENM0202**

### **Course Outline**

### **Summer session 2016**

**Wednesday 6 January to Friday 22 January 2016**

Subject authority:

Dr Renée Morris

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CRICOS Provider Code 00098G

## **OBJECTIVES OF THE COURSE**

The objectives of this course are:

- a) to introduce the student to the structure and functions of the central nervous system including the brain and spinal cord
- b) to allow the student to explore the current state of knowledge in various areas of research such as research into mental illness and degenerative disease, plasticity and repair of the nervous system, stem cells research and genetic engineering, etc.

## **PRACTICUMS**

Practical classes will be under the authority of Mr. Patrick de Permentier and Dr. Renée Morris.

## **COURSE STRUCTURE AND TEACHING ACTIVITIES**

This is a 6 unit of credit course and consists of:

- 18 lectures. All lectures are held in Wallace Wurth lecture theatre LG03.
- 5 laboratory sessions. The two first labs are held in Wallace Wurth G07-06 and the last three practicums are held in Wallace Wurth 115.
- The location for the three revision tutorials remains to be determined.

## **ASSESSMENT PROCEDURE**

There will be two quizzes each consisting of short answers and MCQs (25% of final mark each) and one short/medium answer-type final exam (50 % of final mark).

## **IMPORTANT NOTES:**

- Students must wear enclosed shoes in the practicum rooms
- No eating or drinking in the practicum rooms
- Mobile phone must be switched off during all lectures, laboratories and practicums
- Lab coats are mandatory in Day 3 Practicums. For the students who do not have a lab coat, disposable lab coats will be available for \$5.00 before the practicum.

## **COMMUNICATION**

Email is the official means by which the School of Medical Sciences at UNSW will communicate with you. It is recommended that you check your email every day. All information for the course including slide presentations and, where applicable, lecture notes will be posted on Moodle the day before the different activities.

## ATTENDANCE

Students are expected to be regular and punctual in attendance at all classes in the course. Please note that attendance will be recorded for practical classes and students are expected to attend at least 80% of these practicums.

## LECTURES

Cellular Architecture of the Brain and Spinal Cord	Dr Renée Morris
Gross Anatomy of the Human Brain and Spinal Cord	TBA
The Developing Nervous System	Prof Ken Ashwell
Functional Localisation within the Cerebral Cortex 1	Dr Renée Morris
Functional Localisation within the Cerebral Cortex 2	Dr Renée Morris
The Visual Brain	Dr Renée Morris
Neurodegenerative diseases	A/Prof Kay Double
The Autistic Brain	Dr Renée Morris
Using Genes to Understand Brain: Genetics in Neuroscience	Dr Carol Dobson-Jones
Cannabinoid in Schizophrenia	Dr Tim Karl
Stem Cell-Based Therapy for Neurodegenerative Disease	Dr Kharen Doyle
Gene therapy for the treatment of brain disorders	TBA
Spinal Cord Injury: Can we go Forward?	Dr Renée Morris
What is Multiple Sclerosis?	Dr Ria Arnold
The Emotional Brain	A/Prof Pascal Carrive
The Plastic Brain	Dr Renée Morris
TBA	Dr Penelope McNulty
The Spongiform Brain	Dr Renée Morris

## LABORATORIES

Microscopic Structure of the Spinal Cord	Mr Patrick dePermentier
Microscopic Structure of the Cerebrum and the Cerebellum	Mr Patrick dePermentier
Introduction to the Human Brain and Spinal Cord	Dr Renée Morris
Perception	Dr Renée Morris
Brain Disease	Dr Renée Morris

Please read this outline in conjunction with the following pages on the [Medical Sciences website](#):

- [Advice for Students](#)
  - [Learning Resources](#)
- (or see "STUDENTS" tab at [medicalsciences.med.unsw.edu.au](http://medicalsciences.med.unsw.edu.au) )