



UNSW
A U S T R A L I A

Frontiers in Neuroscience

GENM0202

Course Outline
Summer session 2015

Wednesday 7 January to Friday 23 January

Subject authority:

Dr Renée Morris
renee.morris@unsw.edu.au

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.

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.

PLAGIARISM

UNSW does not tolerate plagiarism in submitted written work. Please refer to <https://my.unsw.edu.au/student/atoz/Plagiarism.html> for more details about what constitutes plagiarism.

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.

APPLICATIONS FOR CONSIDERATION

Students must submit an application for consideration within three working days when sickness or circumstance beyond their control prevent them from completing a course requirement or significantly affect their performance in examination, class test, laboratory test, etc. The form can be downloaded from:

<https://my.unsw.edu.au/student/academiclife/Forms.html#SpecialConsideration>

LECTURERS

Professor Ken Ashwell
Dr Renée Morris
Dr Amanda Craig
Dr Penelope McNulty
Dr Carol Dobson-Jones
Dr Kharen Doyle
Dr Tim Karl
A/Prof Kay Double
Prof Cindy Shannon Weickert
Dr Ria Arnold

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:

- 20 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.
- There are two study days during the course.

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).

LIST OF LECTURES

"Cellular Architecture of the Brain and Spinal Cord", Prof Ken Ashwell
"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
"Stroke: Not just for Old Blokes", Dr Amanda Craig
"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
"Mental Illness", Prof Cyndi Shannon-Weikert

LIST OF LABORATORIES

"Microscopic Structure of the Spinal Cord" laboratory by Mr Patrick dePermentier
"Microscopic Structure of the Cerebrum and the Cerebellum", laboratory by Mr Patrick de Permentier
"Introduction to the Human Brain and Spinal Cord", laboratory by Dr Renée Morris
"Perception", laboratory by Dr Renée Morris
"Brain Disease", laboratory by Dr Renée Morris