

# 513-684 Neurosciences

**Credit Points** 12.5

**Semester** 2

**Prerequisites / Corequisites** Nil

**Coordinator** Professor Mary Galea

**Contact** 36 hours of lectures, tutorials and inquiry seminars.

**Non Contact Requirement** Approximately 80 hours of self directed learning is suggested.

**Description** This subject offers students an opportunity to participate in an advanced macroscopic and microscopic study of the human nervous system. Theoretical neuroanatomy, neurophysiology, developmental neuroscience, and neuropsychology will be integrated with clinical neurology.

**Assessment** 2 hour end of semester examination (40%), 15 minute mid-semester class presentation (20%), written assignment 2,500 words due end of semester (40%)

**Prescribed Texts** Kandel, ER, Schwartz, J.H. and Jessell, T (2000) Principles of Neural Sciences, 4th Edition, New York: Elsevier

## **Subject Objectives**

### **Generic Skills:**

On completion of the subject, students will be expected to be able to demonstrate the following generic skills:

- The ability to evaluate and synthesise basic science research and professional literature and apply this information to clinical situations
- A capacity to articulate their knowledge and understanding in oral and written presentations

### **Specific Skills:**

On completion of the subject, students will be expected to be able to demonstrate the following specific skills:

- The developmental processes in the nervous system
- Sensorimotor systems and the processing of sensory information
- The programming and execution of movement
- Mechanisms of plasticity, learning and recovery of function after injury
- Higher cortical functions and their disorders following brain injury
- Application of neuroscience to clinical situations