

## Course List and Description 2019 – 2021

### For 2019 Intake

Term	Course	Unit
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#### 2019-2020

1	<b>MCNS5301</b> Basic Anatomy and Clinical Approach in Neurology	2.0
	<b>MCNS5101</b> Imaging and Clinical Electrophysiological Techniques	1.5
2	<b>MCNS5302</b> Cerebrovascular Diseases	1.5
	<b>MCNS5303</b> Neurological Diseases	2.5
Summer Session (SS)	<b>MCNS5103</b> Interactive Workshops - Practical Management of Common Neurological Diseases	1.5
	<b>MCNS5102</b> Chinese Medicine and Alternative Therapies	1.0
Sub-total		10

#### 2020-2021

1	<b>MCNS6305</b> Epidemiology, Biostatistics and Research Methodology	1.0
	<b>MCNS6306</b> Practical Statistical Procedures and Scientific Report Writing	1.0
	<b>MCNS5205</b> Rehabilitation Sciences	1.5
2	<b>MCNS5304</b> Neuro-Rehabilitation	1.0
	<b>MCNS5401</b> Health Services Management ( <i>Elective</i> )	1
SS	<b>MCNS5202</b> Specialty Stroke Nursing	1.0
	<b>MCNS5201</b> Neurosurgery	1.0
1/ 2/ SS	<b>MCNS6361</b> Practicum	0.5
	<b>MCNS6381</b> Project	7.0
Sub-total (including MCNS5401)		15

**Total (including MCNS5401) 25**

**Remarks:** The above course list is subject to change. Students will be informed of any changes in due course.

### Course Description (2019-2021)

#### **MCNS5101** Imaging and Clinical Electrophysiological Techniques

This course is designed to facilitate students to understand the principles and application of the common electrophysiological investigations in hospital. These include electroencephalography, evoked potentials, electromyography, nerve conduction study, transcranial Doppler ultrasound, carotid duplex ultrasound, structural brain imaging (CT and MRI), and functional imaging (PET). Furthermore, indications and techniques for special diagnostic procedures, namely lumbar puncture, muscle and nerve biopsy will be taught.

#### **MCNS5102** Chinese Medicine and Alternative Therapies

This course will help students to acquire a basic knowledge of Traditional Chinese Medicine (TCM), such as Yin-Yang, five elements, properties and flavours of herbal medicine and differentiation of syndromes according to the eight principles; the classification of stroke in Traditional Chinese Medicine, subsequent treatment and prescription; common acupuncture points, 12 regular meridians, Governor and Conception vessels; techniques of acupuncture and common sites. Alternative therapies including Tai Chi exercise will also be covered. This course will expand students' perspectives beyond Western medicine in the management of stroke and other neurological diseases.

#### **MCNS5103** Interactive Workshops-Practical Management of Common Neurological Diseases

This course adopts a "case-study" format to analyze the clinical decision in stroke, epilepsy, dementia and neuromuscular diseases; from diagnosis to management, key investigations and differential diagnosis, grading of disability, skills in patient screening and assessment will be covered. This course will equip students the practical knowledge and approach in the evaluation and management of common neurological diseases.

#### **MCNS5201** Neurosurgery

This course aims to teach students the neurosurgical management of head injury, trauma to the spinal cord, coma states, brainstem damage, epilepsy surgery, functional neurosurgery, and stereotactic radiosurgery.

#### **MCNS5202** Specialty Stroke Nursing

This course provides knowledge and skills for nurses in the assessment and management of stroke patients. It will cover nursing management in hyperacute stroke, stroke care planning, protocol making and stroke education, selected nursing topics on mattress assignment, fall prevention, dysphagia screening, incontinent care and NIHSS grading.

#### **MCNS5205** Rehabilitation Sciences

This course will help students to acquire a basic and updated knowledge of different aspects of neurorehabilitation: neuroplasticity, functional concepts in rehabilitation, management of spasticity and other complications from neurological impairment, rehabilitation of specific Neurological Disorders (e.g. Parkinson's disease), rehabilitation after traumatic brain and spinal cord injury, theory and practice of cognitive rehabilitation, sexual rehabilitation, pain management, as well as rehabilitation and palliative care.

#### **MCNS5301** Basic Anatomy and Clinical Approach in Neurology

This course aims to teach students the basic anatomy of the brain (including the brain stem and cerebellum), spinal cord and important nerves. The anatomy will be explained in light of its functions. Relationship between brain regions and behaviors will be discussed. Basic pathological classifications and the fundamentals of clinical approach for neurological diseases will be explained. Principles in history taking, methods of neurological examination (cranial nerves and limbs examination) and an overview of neurological investigations will be discussed.

## Course Description (2019-2021)

### MCNS5302 Cerebrovascular Diseases

This course will particularly focus in Cerebrovascular Disease and Stroke. It will provide basic and most updated knowledge in the following areas: vascular physiology, epidemiology of stroke, the pathogenesis, mechanisms, clinical features, treatment and prevention of stroke. Subarachnoid hemorrhage and its surgical interventions will also be covered.

### MCNS5303 Neurological Diseases

This course aims to teach students the clinical features, diagnosis, pathophysiology, investigations, and management of the following neurological diseases: epilepsy in adult and pediatrics, Parkinson's Disease and other movement disorders, demyelinating diseases, autoimmune neurological diseases, genetics of neurological diseases, heredity neurological disorders and brain tumor, infections of the central nervous system, headache and migraine, Alzheimer's disease and other dementia disorders, various neuromuscular diseases, and developmental disorders.

### MCNS5304 Neuro-Rehabilitation

This course will teach the principles and applications of Neuro-rehabilitation. This includes physiotherapy, occupational therapy, speech therapy, clinical neuro-psychology, social work and dietetics in neuro-rehabilitation. Furthermore, poststroke psychiatric comorbidity including depression, cognitive impairment, and emotional disturbance, and its management will also be taught.

### MCNS5401 Health Services Management (*Elective*)

This course will help students to acquire updated knowledge of different aspects of health services management, including leadership, strategy and planning, risk and quality management, as well as medicine and law.

### MCNS6305 Epidemiology, Biostatistics and Research Methodology

This course will introduce the basic concept of epidemiology, research methodology and the importance of experimental design and planning in the execution of a research project. This course will equip students the fundamentals in these few areas.

### MCNS6306 Practical Statistical Procedures and Scientific Report Writing

This course aims to equip students with practical skills needed in performing statistical analysis using SPSS for research purposes and in preparation of research manuscripts in medicine, stroke, and clinical neurosciences.

### MCNS6361 Practicum

Students will be assigned to have practicum sessions in Chinese medicine acupuncture, cognitive and behavioral assessment in neurological setting, electroencephalogram, imaging, nerve conduction study, speech therapy, and transcranial Doppler ultrasound. The practicum will provide students with clinical exposure to the above areas that have been covered in lectures of other courses. This will enhance and consolidate students' knowledge on these areas.

### MCNS6381 Project

Students have to write an individual report on topics relevant to stroke and clinical neurosciences. This course aims to deepen students' knowledge in a particular neurological area that is of interest to him/her and is relevant to his/her work. This course will also develop students' skills in creative and analytical thinking, research methods, and research writing.