

NEUROMUSCULAR SCIENCES – III

Course Title	Neuromuscular Sciences – III	
Course Code	PT801	
Course Credit	Lecture: 5	
	Practical/ Clinical Training: 3	
	Total: 8	
Course Objective		
<ol style="list-style-type: none"> 1. To understand clinical aspects of diseases and disorders nervous system 2. To integrate clinical knowledge into designing plan of assessment. 3. to formulate short term and long term goals and plan of management in various neuromuscular conditions 		
Detailed Syllabus		
Sr. No.	Name of chapter & Details	Hours Allotted
Section – I		
1	Introduction of Neuromuscular Sciences-III	6
	Definition, Classification, Etiology, Pathogenesis, Clinical Features, Clinical Investigation and Complications of the following conditions. Medical, Surgical And Physiotherapy Management (Assessment And Treatment) including Rehabilitation of:	
2	Peripheral Myopathies	
	• Genetically determined myopathies	4
	• Distal myopathies	4
	• Metabolic myopathies	4
	• Acquired myopathies etc	4
3	Neuromuscular junction disorder	
	• myasthenia gravis	6
	• lambert –eaton myesthenic syndrome etc	6
4	Peripheral Nerve Injury	
	• Classification of nerve injury & Mechanism of nerve injury	2
	• Wallerian degeneration and regeneration process	2

	assessment and management in peripheral nerve injury	
	• nerves of upper limb	14
	• nerves of lower limb	12
5	Peripheral Neuropathies	
	• Mono Neuropathy	6
	• focal and Multifocal Neuropathy	6
	• Generalized Neuopathy	6
	• Inherited Neuropathies etc	6
SECTION II		
6	Chronic fatigue syndrome	
	• Types of fatigue	1
	• Causes of fatigue	1
	• Fatigue assessment	6
	• Fatigue management	6
	• Energy conservation techniques	6
7	Neuro physiology of aging and its effect on movement, posture & gait	
	• Path physiology of aging and its effect on nervous system	3
	• Neurological Assessment of geriatric people	5
	• Fall risk in elderly	5
	• Strategies to improve balance in elderly people	5
	• assessment and management	10
8	Psychosomatic disorder	10
9	Chromosomal /genetic disorder	10
10	Learning disability	10
11	Disorder of speech & language	10
Instructional Method:		
<ol style="list-style-type: none"> Teaching and training sessions will be carried out through active learning. Active participation and contribution in group discussion and seminars are mandatory for students Lectures to be conducted with the help of black board and/or audio-visual aids that includes multi-media projector, OHP, etc. Problem based and/or case based assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated 		

at regular interval.

4. The course includes a laboratory where the students have an opportunity to build and appreciation for the concepts being taught in lectures.
5. Instruction method will be integrated with clinical training, bedside / class room teaching and tutorials as necessary.

Text Books

1. Physical rehabilitation. 5th edition. Susan B. O Sullivan, Thomas Schmdtz. F.A. Davis Company
2. Cash's textbook for Physiotherapists in neurological conditions- 4th Edition. Patricia Downie. Lippincott Williams & Wilkins.
3. Neurological Rehabilitation. 4th edition. Darcy Umphred. Mosby Publication

Reference books

1. Clinical science of neurorehabilitation. 2nd edition. Bruce H Dobkin. oxford university press
2. Adams and Victor's principles of Neurology. 9th edition. Allan H. Ropper, Martin A. Samuels. McGraw-Hill Medical publication
3. Brains diseases of Nervous system. 12th edition. Michael Donaghy. OUP Oxford publication



SYLLABUS