Dr. D.Y. PATIL COLLEGE OF PHYSIOTHERAPY

Dr. D.Y.PATIL VIDYAPEETH, PUNE

(Deemed to be University)

Re-accredited by NAAC with a CGPA of 3.61 on a four point scale at 'A' Grade.

(An ISO 9001:1008 Certified University)

ACA/R/05 Date:18/6/2018

LESSON PLAN

Subject : Electrotherapy-II
Class : BPT II year IV Semester (2018)
Class Incharge : Dr. Neha Kulkarni PT)
Subject Teacher/s : Dr. Tanpreet (PT)
Total Hours prescribed : 160 (Theory- 64, Practical-96)

Sr No.	Topic	No. of hours required		Mode of teaching	Remarks
		Th.	Pr.		
`1	**Low frequency currents**			Lecture,Group discussion, Demonstrations	
A	Faradic type current, intermittent galvanic current and galvanic current	**10**	**15**		
	• Principles & Introduction	2	3		
	• Physiological effect	2	3		
	• Therapeutic effect	2	3		
	• Indication & Contra indication	2	3		
	• Precaution & application skills	2	3		
B	Cathodal /Anodal Galvanism, Iontophoresis	**3**	**5**	Lecture,Group discussion, Demonstrations	
	• Indication Dosages Precaution	1	1		
	• Operational skills of equipment	-	1		
	• Patient preparation	-	1		
	• Physiological effect	1	1		
	• Therapeutic effect	1	1		
C	Electrical stimulation (Short /long pulse motor points)	**8**	**10**	Lecture,Group discussion, Demonstrations	
	• Introduction to electrical stimulation of nerve & muscle	1	1		
	• Physiological effects and therapeutic uses	1	1		
	• Nerve injuries	1	1		
	• Principles of applications, types of electrodes, placement of electrodes	1	1		
	• Motor point stimulation to anterior forearm muscles & posterior forearm muscles	1	1		
	• Motor point stimulation to Hand muscles & arm muscles	1	1		
	• Motor point stimulation to scapular muscles	1	1		
	• Motor point stimulation to facial muscles	1	1		
	• Motor point stimulation to anterior leg muscles & posterior leg muscles	-	1		
	• Motor point stimulation to thigh muscles & foot muscles	-	1		

D	Faradic current under pressure elevation	**2**	**4**	Lecture,Group discussion, Demonstrations	
	• for Upper Limb	1	1		
	• for Lower Limb	1	1		
	• Operational skills of equipment		1		
	• Patient preparation		1		
E	Electrical Reactions and Electro – diagnostic tests	**10**	**20**	Lecture,Group discussion, Demonstrations	
	• Electrical Stimuli and normal behaviour of Nerve and muscle tissue.	1	2		
	• Types of lesion and development of reaction of degeneration ▪ (Seddon's classification	1	2		
	▪ Sunderland's classification	1	2		
	▪ Wallerian degeneration	1	2		
	• diagnostic tests ▪ FG Test ➢ Introduction ➢ Application	1	4		
	▪ SD Curve ➢ Introduction ➢ Innervated muscle ➢ Denervated muscle ➢ Application	1	4		
	▪ application and characterstics	2	2		
	▪ Chronaxie, Rheobase& pulse ratio	2	2		
F	High voltage pulsed galvanic current	**1**	**2**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
G	TENS	**5**	**5**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Introduction	1	-		
	• Types of TENS, Pain gate mechanism	2	1		
	• Indication, contraindication	1	-		
	• Operational skills of equipment	1	1		
	• Patient preparation	-	1		
H	• Micro –currents	**1**	**1**	Lecture,Group discussion, Demonstrations	
	• Didynamic currents	-	-		
2	**Medium Frequency Current Interferential therapy**	**5**	**10**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Introduction, Production	1	1		
	• Physiological effects,	1	1		
	• Indications, Uses	1	1		
	• Danger, Contraindication of IFT	1	1		
	• Operational skills of equipment	1	2		
	• Patient preparation	-	1		
	• Dosage	-	1		
	• Russian currents	**1**	**1**		
	• Rebox type currents	**1**	**1**		
3	**Biofeedback method**	**2**	**3**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Instrumentation, principles & therapeutic effects	1	1		
	• Indications, contraindications, limitations, precautions	1	-		
	• Operational skills and patient preparation	-	2		

4	**Ultra – violet rays (UVR)**	**4**	**6**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Introduction	1	1		
	• Production	1	1		
	• Types of UVR lamps	1	-		
	• Physiological effect, therapeutic uses indication	1	-		
	• Dosages	-	2		
	• Operational skills and patient preparation	-	2		
5	**LASER**	**4**	**5**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Principle of laser	1	-		
	• Type of laser	1	-		
	• Therapeutic uses	1	-		
	• Principles of application	1	1		
	• Dosage	-	1		
	• Danger and Contraindication	-	1		
	• Operational skills of equipment	-	1		
	• Patient preparation	-	1		
6	**Care of wound**	**2**	**4**	Lecture,Group discussion, Demonstrations,	
	• Application of therapeutic currents	1	1		
	• Application of US	1	1		
	• Application of UVR	-	1		
	• Application of Laser	-	1		
7	**Combination Therapy**	**2**	**2**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Introduction & Principles	1	1		
	• Application	1	1		
8	**Intermittent Pneumatic compression Therapy**	**2**	**4**	Lecture,Group discussion, Demonstrations, PowerPoint presentation	
	• Introduction & Principles	1	1		
	• Operational skills of equipment		1		
	• Methods of Applications, Regionwise ▪ Upper limb, Lower limb, Tarso	1	1		
	• Operational skills and patient preparation	-	1		
9	**Bioethics**	**1**	-	Lecture,Group discussion, Demonstrations, PowerPoint presentation	

Total Didactic Hours

Theory	**-**	64 hours
Practical	-	96hours
SPT	-	96 hours
Total Scheduled Hours	-	256 Hours

Subject Incharge Principal