

INSTITUTE	FACULTY OF PHYSIOTHERAPY
PROGRAM	MASTER OF PHYSIOTHERAPY
SEMESTER	1
COURSE TITLE	ADVANCE PHYSIOTHERAPEUTIC
COURSE CODE	17MP0103
COURSE CREDITS	5

Objective:

- 1 To Demonstrate professional behavior and respectful communication and conduct patient centric physiotherapy assessments of various using best supportive evidence.
- 2 To Analyze the relevant clinical findings with regards to contextual, environmental and personal factors.
- 3 To Develop realistic and acceptable therapeutic goals that are patient centric consistent with the needs and goals of the patient.
- 4 To Develop protocols for different conditions and analyze the physiotherapy related problems that are needed for intervention.
- 5 To Demonstrate the evidence based advanced physiotherapy management for various conditions.

Course Outcomes: After completion of this course, student will be able to:

- 1 Demonstrate professional behavior and respectful communication and conduct patient centric physiotherapy assessments of various using best supportive evidence.
- 2 Analyze the relevant clinical findings with regards to contextual, environmental and personal factors.
- 3 Develop realistic and acceptable therapeutic goals that are patient centric consistent with the needs and goals of the patient.
- 4 Develop protocols for different conditions and analyze the physiotherapy related problems that are needed for intervention.
- 5 Demonstrate the evidence based advanced physiotherapy management for various conditions.

Pre-requisite of course: Have a basic understanding of Patient's condition and treatment plan

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
2	0	1	50	30	20	50	50

Contents : Unit	Topics	Contact Hours
1	General Physiotherapy Maternal and child care in general physiotherapy. , Applied neuro-anatomy and neuro-physiotherapy. , Functional training – Respiratory exercises, Training for feeding, bladder and bowel training, coughing and compression, Artificial respiration, inhalation therapy & intensive care unit procedures.	8
2	Theories Inhibition and facilitation techniques. , Theories of motor learning. , Therapeutic bio feedback & psychosomatic training.	8
3	Pain relieving modalities Pain: Neurobiology, Various theories, Modulation and Physiotherapy Management including electromagnetic radiations, ultrasound, Electro acupuncture etc. , Acupuncture: definition, principles, techniques, physiological effects, indications, contraindications, dangers & integration of acupuncture with physiotherapy. , Magneto therapy. , Naturopathy, Dry Needling in various conditions, Combination therapy, shock wave therapy, long wave therapy.	8
4	Yogasanas and Pranayams Yogasanas& Pranayama a. Physiological & therapeutic principles of yoga b. Yogasanas for physical culture, relaxation and meditation. c. Application of Yogasanas in physical fitness, flexibility, cardiac rehabilitation and neuromotor learning. d. Pranayama and respiratory physiology. e. Kriyas and their physiological significance. Therapeutic application of yoga. f. Yoga – a holistic approach.	8
5	Manual Technique History of manual therapy, overview of manual therapy approaches for all the joints, Clinical Reasoning and differential clinical diagnosis and practical application of different approaches such as – Maitland, Kaltenborne, Cyriax, Mulligan and Mackenzie. , Soft tissue approaches: Myofascial Release techniques, Neural tissue mobilization, Muscle Energy Techniques (MET), Position Release Therapy (PRT), Kinetic chain approach along with practical application., Massage, mobilization and manipulations.	12
6	Ergonomics and Recent evidences Ergonomics , Recent advances and Evidence based Practice in all physiotherapeutic conditions.	8
7	Advanced Physiotherapeutics in medical condition Physiotherapy in common conditions of skin, Physiotherapy in common vascular diseases. , Physiotherapy in nutritional deficiency diseases., Physiotherapy in respiratory disorders. , Physiotherapy Management of ischemic heart diseases. , Exercise planning and prescriptions. , Physiotherapy in psychiatry. , Management of pain in neurological and Musculo-skeletal disorders. , Physiotherapy management in arthritis and allied conditions.	14

Contents : Unit	Topics	Contact Hours
8	Advanced Physiotherapeutics in Surgical condition Monitoring systems, defibrillator and Artificial respirators. , Physiotherapy in post operative management of metabolic, hormonal, neoplastic and infective conditions of bones and joints., Pre and post operative physiotherapy in tendon transfer. , Physiotherapy management following head injuries, in intensive care and neurosurgical procedures. , Physiotherapy following general surgery. , Physiotherapy following Uro-surgery. , Physiotherapy following plastic surgery. , Physiotherapy management following selective and common cases of oncologic surgeries, Physiotherapy following obstetric and gynaecological disorders.	14
Total Hours		80

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	Manual technique Maitland, Kaltenborne, Cyriax, Mulligan and Mackenzie., Soft tissue approaches: Myofascial Release techniques, Neural tissue mobilization, Muscle Energy Techniques (MET), Position Release Therapy (PRT), Kinetic chain approach along with practical application., Massage	12
2	Yogasanas and Pranayams Yoga and Pranayam	8
3	Pain relieving modalities Various modalities using electromagnetic radiations - ultrasound, Electro acupuncture etc., Dry Needling in various conditions	20
Total Hours		40

Textbook :

- 1 Alternative Therapies, Swati Bhagat, Jaypee, 2004
- 2 Cash's textbook of chest heart and vascular disorders for physiotherapists, Patricia A. Downie, Jaypee, 1993
- 3 Cash's textbook of general medical and surgical conditions for physiotherapists, Joan E. Cash, Patricia A. Downie , Lippincott, Philadelphia., 1990
- 4 Motor Control: Translating Research Into Clinical Practice, Anne Shumway-Cook, Marjorie H. Woollacott, Lippincott Williams & Wilkins., 2007
- 5 Therapeutic Modalities, Chad Starkey, F. A. Davis , 2013
- 6 Electrotherapy Explained: Principles and Practice, Val Robertson, PhD, Alex Ward, John Low, Ann Reed., Elsevier Health Sciences, 2006
- 7 Therapeutic Exercise Foundations and Techniques, Carolyn Kisner, Lynn Allen Colby, John Borstad , F. A. Davis, 2017

References:

- 1 Neurological Rehabilitation, Neurological Rehabilitation, Janet H. Carr, Roberta B. Shepherd, Elsevier India, 1998
- 2 Oxford Handbook of Urology, Oxford Handbook of Urology, John Reynard, Simon Brewster, Oxford university, 2013
- 3 Physiotherapy in Obstetrics and Gynaecology, Physiotherapy in Obstetrics and Gynaecology, Margaret Polden, Jill Mantle , Elsevier - Health Sciences Division, 1990
- 4 Braddom's Physical Medicine and Rehabilitation, Braddom's Physical Medicine and Rehabilitation, David X. Cifu , Elsevier - Health Sciences Division, 2015

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation

Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking
10.00	20.00	25.00	25.00	10.00	10.00

Instructional Method:

- 1 Theory + Practicals

Supplementary Resources:

- 1 NA