INSTITUTE	**FACULTY OF PHYSIOTHERAPY**
PROGRAM	**MASTER OF PHYSIOTHERAPY**
SEMESTER	**2**
COURSE TITLE	**PHYSIOTHERAPY IN MUSCULOSKELETAL SCIENCES-II**
COURSE CODE	**17MP0204**
COURSE CREDITS	**6**

Objective:

1 To learn the interpersonal and intercommunication skills

2 To learn the advanced physiotherapy management skills in various musculoskeletal conditions

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

1 Enable to set realistic, patient-centered goals that focus on functional outcomes, improving the quality of life, and maximizing independence

2 Enable to promote overall musculoskeletal health through community education programs, ergonomic assessments, and preventive strategies in work, sport, and daily activities.

3 Gain expertise in designing injury prevention programs for various populations, including athletes, workers, and older adults.

Pre-requisite of course: To have the deep knowledge of all musculoskeletal conditions

Teaching and Examination Scheme

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

Contents : Unit	Topics	Contact Hours
1	**Physiotherapy management procedures in General Musculoskeletal disorders:** Degenerative disorders of joints , Infections of bones and joints , Arthropathies, Tumors of the bone , Congenital deformities , Spinal deformities , Developmental disorders of bone , Metabolic and endocrine disorders , Conditions related to upper extremity, lower extremity and spine , Soft tissue: overuse injuries , Neuromuscular disorders, Soft tissue acute traumatic injuries	10
2	**Physiotherapy management procedures in Traumatic Orthopedics** Fractutes and dislocations of upper extremities , Fractutes and dislocations of lower extremities , Fractutes and dislocations of spine, Fractutes of sternum and ribs	10

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Contents : Unit	Topics	Contact Hours
3	**Physiotherapy management procedures in Orthopedic surgeries** Amputation, Joint replacement surgeries , Osteostomy and arthrodesis , Surgery for correction of bone deformities and contractures, Surgical procedures for fracture, dislocation, Tendon transfers, Bone grafting, Nerve suturing and grafting	6
4	**Orthosis, Prostheses and mobility aids in musculoskeletal problems** Principles of Orthosis and prostheses, Biomechanical compatibility, materials and designs of mobility aids, Different types of Orthosis and Prostheses used in musculoskeletal problems, Functional training with Orthosis and Prostheses	10
5	**Physiotherapeutic approaches in musculoskeletal conditions** Manual therapy approaches for specific joints of upper extremity, lower extremity and spine, Therapeutic exercises commonly used in musculoskeletal conditions including correction exercises and home exercises, Pilates and core stability exercises, Proprioceptive Neuromuscular Facilitation (PNF), Hydrotherapy in common musculoskeletal conditions, Swiss ball exercises, Taping, Wrapping and Bracing techniques.	12
6	**Ergonomic principles and its application** Ergonomic principles and its application	5
7	**Recent advances in Orthopedic Physiotherapy** Recent advances in Orthopedic Physiotherapy	10
8	**Community based rehabilitation in musculoskeletal conditions** Community based rehabilitation in musculoskeletal conditions	7
9	**Evidence based physiotherapy management for different musculoskeletal conditions** Evidence based physiotherapy management for different musculoskeletal conditions	10
Total Hours		**80**

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	**Practicals/OPD/Case Presentation** Practicals/OPD/Case Presentation	80
Total Hours		**80**

Textbook :

1 Basic Biomechanis Of Musculoskeletal System, 3rd Edition , Margreta Nordin , Lipnikott Willaims, 1989

2 Orthopedic Physical Assessment , David J Meggi, Elsevier , 2014

3 Joint Structure And Function: A Comprehensive Analysis Fourth Edition, Pamela K. Levangie, F. A. Davis Company, 2005

4 Clinical Orthopedic Rehabiliattion, S . Brent Brotzman, Mosby, 2003

Textbook :

5 Textbook of Orthopedics, John Ebnezer, Jaypee Brothers , 2016

References:

1 Apley and Solomon’s System of Orthopaedics and Trauma , Apley and Solomon’s System of Orthopaedics and Trauma , Apleys, Taylor & Francis, 2018

2 Gait Analysis , Gait Analysis , Michael. Whittle, Elseveir, 2007

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 / Creative**
0.00	0.00	35.00	35.00	30.00	0.00

Instructional Method:

1 THEORY + PRACTICAL

Supplementary Resources:

1 NA

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