

MUSCULOSKELETAL PT

GOALS

1. Academic Goals

- Provide high-quality education in musculoskeletal physiotherapy to undergraduate (BPT) and postgraduate (MPT) students and develop a strong foundation in **anatomy, biomechanics, pathology, and evidence-based physiotherapy** interventions.
- Encourage students to participate in **continuing education programs, workshops, and seminars** on advanced musculoskeletal techniques.
- Train students in **clinical reasoning, patient management, and interdisciplinary collaboration** for effective treatment.

2. Clinical Goals

- Offer **comprehensive assessment and treatment** of musculoskeletal conditions and post-surgical rehabilitation with the use of **evidence-based physiotherapy approaches** for manual therapy, electrotherapy, and exercise-based rehabilitation.
- Improve **pain management strategies** and promote **early mobilization** and functional recovery in patients with orthopaedic conditions.
- Focus on **preventive physiotherapy** to reduce the risk of musculoskeletal disorders in the general population by conducting **awareness programs on ergonomics, workplace injuries, and posture correction**.

3. Research and Development Goals

- Conduct research in areas such as **exercise therapy, biomechanics, injury prevention, and rehabilitation techniques** and encourage students and faculty to publish research in **peer-reviewed journals and conferences**.
- Develop **new physiotherapy protocols and techniques** for musculoskeletal rehabilitation by collaborating with orthopaedic surgeons, rheumatologists, and sports medicine experts to advance treatment strategies and protocols.

4. Professional Development and Innovation

- Train physiotherapists in **advanced manual therapy techniques (Maitland, Mulligan, McKenzie, etc.)**.
- Introduce **new technologies** such as virtual rehabilitation and AI-based movement analysis.

OBJECTIVES

1. Academic Objectives

- To impart comprehensive education in musculoskeletal physiotherapy and develop students' understanding of **basics** related to musculoskeletal conditions.
- To enhance clinical knowledge and skills by facilitating participation in **workshops, seminars, and continuing education programs** and develop **critical thinking, clinical reasoning, and interdisciplinary collaboration** among students.

2. Clinical Objectives

- To provide **evidence-based assessment and treatment** for musculoskeletal conditions and integrate **manual therapy, electrotherapy, and therapeutic exercise** in patient management.
- To implement **effective pain management strategies** and encourage **early mobilization** and functional recovery for better patient outcomes.
- To conduct **awareness programs on ergonomics, workplace injuries, and musculoskeletal health**.

3. Research and Development Objectives

- To conduct **research**, encourage faculty and students to publish in **peer-reviewed journals and conferences**.
- To establish **innovative physiotherapy protocols** based on scientific evidence and clinical trials by collaborating with **orthopaedic surgeons, rheumatologists, and sports medicine professionals** to enhance physiotherapy outcomes.

4. Professional Development and Innovation Objectives

- To provide training in **advanced manual therapy techniques**
- To integrate **emerging technologies** such as virtual rehabilitation and AI-based movement analysis.
- To encourage lifelong learning and professional growth through **certifications, fellowships, and advanced courses**.

TEACHING -LEARNING STRATEGIES

Sr.No.	Teaching-Learning Method	Objectives
1	Problem-based learning (PBL)	Critical thinking, analytical skills, and clinical decision-making.
2	Interactive lectures	Delivering theoretical knowledge, clinical kinesiology, pathology of musculoskeletal disorders, and early rehabilitation.
3	Demonstrations	Observe correct assessment and treatment techniques before practice.
4	Case discussions and clinical reasoning sessions	Encourage active student participation during clinical rounds and case presentations.
5	Evidence-based practice	Ensuring students remain updated with the latest advancements in musculoskeletal physiotherapy.
6	Self-directed learning	Access to online resources, peer-reviewed journals, and digital research databases.
7	Hands-on clinical training	During clinical rounds.
8	Simulation-based learning	Musculoskeletal assessment and treatment techniques to build confidence before handling patients
9	Case-based learning (CBL)	Exposing students to diverse, real-life patient scenarios and improving diagnostic reasoning.
10	Interdisciplinary collaboration	To work alongside orthopaedic surgeons, sports therapists, and rehabilitation specialists for a holistic treatment approach
11	Research projects	Advanced knowledge in Musculoskeletal Physiotherapy.