

MASTER OF PHYSIOTHERAPY (MPT)

(2 Year DegreeCourse)



GOKUL PHYSIOTHERAPY COLLEGE

Gokul Global University, Near Sujanpur Patia, State Highway 41, Siddhpur-384151, Gujarat, India





PROGRAMME OUT COME

(MPT)

After successful completion of the program, an individual will be able to:

PO1 KNOWLEDGE: Apply the concepts of Anatomy, physiology and kinesiology in professional Physiotherapy Practice and select various exercise therapies and Electrotherapeutic techniques for prevention and Treatment of various conditions

PO2 LEARNING SKILLS: Reflect knowledge on assessment planning, implementation in physiotherapy practice requiring for individual rehabilitation.

PO3 PROFESSIONAL ETHICS: Achieve moral principles and values that out to guide the professionalism, ethics, and integrity in their interaction with patients, colleagues, and the community.

PO4 ANALYTIC SKILLS: Critically evaluate research literature, apply evidence- based practices, and contribute to the advancement of physiotherapy through research.

PO5 SOCIAL AWARENESS: Demonstrate the impact of physiotherapy knowledge on the society by participate in interdisciplinary collaboration, effectively contributing to a patient-centered approach to healthcare.

PO6 LIFE LONG LEARNING: Demonstrate a commitment to professional growth and lifelong learning to promote absorption and adoption of new knowledge and tools.





PROGRAMME SPECIFIC OUTCOME (MPT)

1. Work effectively in various inter professional collaborative settings like hospitals, Rehabilitation Centers, Special Schools, Educational Institutions, Health and Fitness Centers, Geriatric Centers, Ergonomic Consultant in Corporate Sectors, Private Consultation, Home Care Services, Industrial Sectors, Sports Management, Fitness Consultant

Promote health education and improved quality of life through the practice of the profession.









COURSE OF THE STUDIES

The course of study, subjects & teaching schedule for I&II-

yearMPTcourseisshownseparatelyinTable1&2.

Table-1:MPTFirstYear(First12Months)

Sr.No	Subjects	Hours
1	BasicSciences	
1A	Work&ExercisePhysiology	80
1B	ElectroPhysiology	20
1C	Biomechanics	80
1D	ResearchMethodology&Biostatistics	70
1E	EducationalTechnology	40
1F	EthicsManagement &Planning	40
2	Physical&FunctionalDiagnosis	130
3	Clinical	1080
4*	Seminars, Journal reviews, Fieldwork, Casepresentations	60
5 ⁺	Dissertation&Microteaching	100
Total	•	1700

^{*}Subjectsnotforuniversityexamination.

Table-2:MPTSecondYear(13-24Months)

Sr.No	Subjects	Hours				
1	AdvancedPhysiotherapeutics	160				
2	SpecializationSubject(Theory-150Hours&Practical—150Hours)	300				
3	Clinical	1080				
4	Dissertation&Microteaching	110				
5*	Seminars, Journal reviews, Fieldwork, Case Presentations	50				
	Total					

Specialization:







⁺Subjectsexaminationwillbeattheendofsecondyear.



MPT FIRST YEAR

Sr.No	Subject Code	Subject	Total Marks
1	FPM110201	Theory:BasicSciences	100
2	FPM110202	Theory:Physical&FunctionalDiagnosis	100
3 FPM110205		Practical: Clinical Examination(Specialization minor case, non-Specializationminor case,Spotsand Viva)	150
		350	

MPT SECOND YEAR

Sr. No	Subject Code	Total Marks	
1	FPM110203	100	
2	FPM110204	Theory:Specialization (Elective Paper)	100
3	2 EDM110206	Practical: Clinical	
3	FPM110206	Examination(SpecializationMajor	150
		Case&Viva)	100
		Total	450

PracticalExamination

1. ClinicalExamination(300Marks)

Allcasesshouldbeonpatientsandnotonmodels









MPT First Year:

Examination	Marks
Specializationminorcase, NonSpecialization	150
minorcase& Spots& VivaVoce	(50MarksEach)

Day 1: Non Specialization (Minor) case, Specialization (Minor) case and Viva & spots

MPT Second Year

Examination	Marks
Specializationmajorcase&viva	150

2. Dissertation&Microteaching(100Marks)

Examination	Marks	
Dissertation&Microteaching	100	
	(50MarksEach)	

Day1:Specialization(Major)caseandViva

Day2:Microteaching&Dissertationpresentation





COURSE CONTENTS:

BASICSCIENCES (FPM110201)

Work&ExercisePhysiology:

- 1. SourcesofEnergy,EnergyTransferandEnergyExpenditure atrestandvariousphysicalactivities.
- Nutrition, Body consumption, caloric balance, food for the athlete,regulationoffoodintake,idealbodyweight,optiona lsupplyofNutrients.
- 3. Metabolicconsideration—
 VO2,Lactatethreshold,RQ,energyexpenditureintermsof
 calorimetry.
- Acuteeffectsofexerciseon—
 Cardiovascular, Respiratory, Metabolic (aerobic & anaerobic), Thermo-regulatory, Buffer (pH), Neuromuscular-skeletal, Endocrine, Immunesystems.
- 5. Conditioning effects (adaptations) of exercise on —

 Cardiovascular, Respiratory, Metabolic (Aerobic &





anaerobic), Thermo regulatory, Buffer(pH) Neuromusculoskeletal (strength, power, endurance, speed, flexibility, agility, skill) Endocrine, Immunesystems.

- 6. Bodycomposition
- 7. Exerciseatdifferentaltitudes.
- 8. Exerciseatvariousclimatic conditions.
- 9. Special aidstoperformanceandconditioning.
- 10. Exerciseprescriptionforhealthandfitnesswithspecialemp hasistocardiovasculardisease, Obesity and Diabetes.
- PrinciplesofhealthpromotionforGrowingChildren,
 HealthyAdults,Pregnant/Lactatingfemales,Elderly,
 Sportsperson.
- 12. AerobicandAnaerobicExerciseTraining.
- 13. Fatigueassessment, Types, and Relevance with Exercise Tolerance tests & Training and management

14. FitnessTestingfor:

- Aerobic&anaerobicpowerandcapacity
- Muscular strengthandpower,flexibility.







- 15. Obesity-exercises for weight reduction
- 16. Exerciseandaging
- 17. Clinical exercise physiology
- 18. Physiological&physicalwork.
- 19. Ergonomic aspects of work, energy transfer, oxygen intake andoxygen debt,cardio-resErgonomicaspectsofexerciseonoxygen,energyconsu mption,METvalueofvariousexercisesandactivity.

Electrophysiology

- CharacteristicsandcomponentsofElectrotherapeuti
 estimulation
 systemsandcharacteristicandcomponentsofElectro
 physiologicalassessmentdevices.
- 2. Electrical excitability of muscle and nerve and composition ofperipheralnerves.
- A.Muscleplasticityinresponsetoelectricalstimulation.
 B.InstrumentationforNeuromuscularelectricalstimulation(NMES)
- 4. Neurobiologyofafferentpaintransmissionandcentr







alnervoussystemmechanismsofpain modulation.

- 5. Electrical stimulation and circulation.
- 6. ClinicalElectrophysiologicaltesting.
- 7. Bio-electricity(R.M.P-ActionPotential)
- 8. Neurotransmitters.Synapse&Synaptictransmission.
- 9. Classification-musclefibers, nervefibers, motorunit.
- 10. Propagation of nerve impulse & physiology ofmusclecontraction.
- 11. Reflex-classification&properties.
- 12. Sensations-Pathways&classification.
- 13. Typeofnerveinjury&Walleriandegeneration.

BioMechanics

- 1. Materialproperties of bones and soft tissues. Applied mech anics in the evaluation procedures.
- 2. Internalandexternalforcesduringpostureandactivities.
- 3. Biomechanicsofrespiration, circulation, handfu nction, peripheral joints and spine.
- 4. (i)Gait:-NormalGaitanditsdeterminants-Gaitparameterincludingtemporalandspatial
 - KinematicandKineticofnormalhumangait







- Pathologicalgait
- Running, Stairclimbing

(ii)GaitAnalysis:

- Overviewofnormalgaitanalysis:kineticandkinematic analysis;Descriptionofsomeofthemostcommonlyuse dtypesofobservationalgaitanalysis;Advantagesanddi sadvantagesofkinematicqualitativeandkinematicqua ntitativegaitanalyses.
- Gait Training, Pre ambulation programme, assistive devices and gait patterns, Recentad vances in an alysis of Gait.
- 5. PostureControl,OptimalPostureandtheirdeviationsindifferent planes.
- 6. in Ergonomics and its application working environments.
- 7. Methods of kinetics and kinematics investigation,
 Anthropometricmeasurements.
- 8. Forces, equilibrium, levers: laws, mechanical advantage, materials & properties of bones and softtissues.
- 9. Analysis of functional hazards related to environment/industry





&clinicalreasoningfortheappropriateergonomicadvice.

10. Applied mechanics in the application of prosthesis, orthosis andmobility aids: materials, designs and biomechanical compatibility. Aidsandappliances, adaptive functional devices to improve dysfunction.

ResearchMethodologyandBiostatistics

- 1. Meaningofresearch, objectives, motivation & types of research.
- 2. Researchprocessandcriteriaofgoodresearch.
- 3. ProblemsencounteredbyresearchersinIndia&d efiningtheresearchproblem.
- 4. Researchdesign&samplingdesign.
- 5. Measurement&scalingtechniques.Methodofdatacollection.
- 6. Processing and analysis of data. Sampling fundamentals.
- 7. TestingofhypothesisandChi-squaretest.
- 8. Analysisofvariance&co-variance.
- 9. Writingresearchforpublication, Presentingaresearchreport
- 10. ResearchEthics, Plagiarism.
- 11. Roleofcomputerinresearch.
- 12. Teachingmethodology, Ethics and Administration









EthicsandAdministration

- 1. ConceptofMorality, Ethics and Legality.
- Rules of Professional conduct, Medico
 Legal andMoralImplications.
- 3. Communicationskills, Clientinterest and Satisfaction.
- 4. InterDisciplinaryRelation,Copartnership,MutualRespect,ConfidenceandCommunica
 tion,ResponsibilitiesofthePhysiotherapists,StatusofPhy
 siotherapistinHealthCare.
- 5. Roleof Professional in SocioPersonal andSocio
 Economicalcontext.
- 6. NeedofCouncilActforregulationofProfessionalPractice.
- 7. Self-RegulatoryroleofProfessionalAssociation.
- 8. RulesofProfessionalConduct.
- 9. Role of WCPT, Various branches and special interest group of WCPT.
- 10. Indian association of physiotherapists: rules, regulations,

framework, aims, and objectives. Physiotherapy and law. Medico

legal aspects of physiotherapy, liability, negligence,







malpractice, licensure, workman's compensation.

- 11. Administration&Marketing-personnelPoliciesCommunication & Contract. Administration principles
 based onGoal & Function at large Hospital /
 Domiciliary set up /
 PrivateClinic/AcademicInstitution.
- 12. Methodsofmaintainingrecords–Budgetplanning.
- 13. Performance analysis Physical structure, reporting system, ManP Status, Functions, Quality & Quantity of Services, Turnover –Costbenefit, Contribution.
- 14. Hospitalasanorganization-Functionsandtypesofhospitals.
- 15. Roles of Physical therapist, Physical therapy
 Director, Physiotherapy Supervisor, Physiotherapy assis
 tant, Physiotherapyaide.
- 16. ConfidentiallyofthePatient's status.
- 17. Legalresponsibility.
- 18. Consumerprotectionlaw, healthlaw, MCI.
- 19. Standardsofpracticeforphysiotherapists.
- 20. Liabilityandobligations inthecaseofmedicallegalaction
- 21. Lawofdisability&discrimination **EducationTechnology**





- 1. Education:aims,agencies,formalandinformaleducati
 on,Modern & contemporary philosophies of
 education, Role
 ofeducationalphilosophyandCurrentissuesandtrendsi
 neducation
- 2. Concepts ofteachingandlearning
- Principles and methods of teaching: Strategies & Planning ofteaching, Organization, writing lesson plan, Audio visual aids, Teaching methods.
- 4. Curriculumcommittee, curriculum development for Ph ysiotherapy, Typesof curriculum, objectives, course objectives, Placing, Course placement, time allot ment, Selection and organization of learning experience, Plansof courses, Rotational plan.
- 5. Measurementandevaluation.
- 6. Guidanceandcounseling.
- 7. Facultydevelopmentanddevelopmentofpersonnelfor PTservices.





PHYSICAL&FUNCTIONALDIAGNOSIS (FPM110202)

- 1. ClinicalDecisionMaking-
 - PlanningEffectiveTreatment.Clinicaldecision-making models, Team approach, Foundation for clinicaldecision making.
- 2. Principlesandapplicationofinvestigativeandimagingtec hniquesinPhysiotherapy
 - Bloodtest
 - ArterialBloodGas(ABG)analysis
 - PulmonaryFunctionTest(PFT)
 - Radiologicalexamination
 - ComputerizedTomography(CT)
 - MagneticResonanceImaging(MRI)
 - Ultrasonography(USG)
 - Electrocardiography(ECG)
 - Dopetesting
- Evaluationassessmentandtreatmentplanningstrategies fo
 rMusculo-skeletal, neurological, cardiopulmonary,
 sports
 specificand

otherphysiotherapyconditions:Principlesofevaluation,c





linicalmanifestations,
generalandspecificclinicalexamination.

- A. Physiotherapyassessmentofthefollowing:
 - Rangeofmotion(ROM)
 - Tone
 - Muscularstrengthandendurance
 - Flexibility
 - Coordination:Equilibrium&Nonequilibriumtest
 - Sportsspecificskills
 - Cardiacefficiency
 - Sensoryevaluation
 - FunctionalEvaluation:Variousscoringm ethodsinfunctionalassessment,Validitya ndreliability
 - Fitnessevaluation: Aerobic & Anaerobic
 - Spasm
 - TriggerPoint
 - TenderPoint
- B. Assessmentofcognitive,perceptualdysfunctions and vestibular dysfunction.
- 4. Electro-Diagnosis:





- CharacteristicsandcomponentsofElectrotherapeu ticstimulation systems and Electro physiological assessmentdevices.
- Instrumentation for neuron uscular electrical stimulation.
- Electrical properties of muscleand nerve.

Neurobiologyofafferent pain transmission and centralnervoussystemmechanismsofpainmodulation.

- Electrical stimulation and circulation.
- Clinical Electro physiological testing: Instruments,

Techniquesand

- Interpretations of Nerve conduction
 velocityincludingRepetitiveNerve
 - Stimulation
- Electromyography
- Bio-feedbacktechnique.
- Lateresponses
- Conceptsofelectrophysiologicalstudiesinne uromusculardiseasesasadiagnosticandthera







peutictool.

- Evokedpotentials–VEP,SSEP,MEP,BAEP
- Psychological aspects of rehabilitation in disability: Psychological tests.
- 6. Developmental Screening
 - (a) FactorsMotorcontrolassessment
 - (b) Motorcontroltheories/mechanism
 - (c) Patternsofnormaldevelopment
 - (d) specificprocedures andtestsusedtoassessmotorcontroldefects
- 7. Neurodevelopmentalassessment
- 8. Anthropometry
 - a. Bodymeasurements:Height,Weight,Circumference
 - b. BodyProportion:BodyMassIndex(BMI),WaistHipRatio(WHR)
 - c. BodyComposition:Somatotyping

Methodsofmeasurement: Waterdisplacement, Skinfol dmeasurement, underwaterweighing, Bioelectric Impedance

Analysis(BIA)

9. DifferentialdiagnosisinPhysiotherapy







- 10. ExerciseECGtestingand monitoring.
- 11. Pulmonaryfunctiontests.
- 12. Physicaldisabilityevaluationanddisabilitydiagnosis.
- 13. Gaitanalysisanddiagnosis.
- 14. Functional evaluation.
 - Theconceptsofhealthstatusimpairment; functionall a. imitations; disability and handicap; definition of functionalactivity the purposes and and components functionalassessment; of the selection of activity roles for and an individualbasedonhisorhercapabilitiesandfunctio nallimitations.
 - b. Variousformsoffunctionaltests;physicalfunctiontestand

 multidimensional functional assessment
 instrument,
 identificationofinstrumentfortestingfunction.
 - c. Variousscoringmethodsusedinfunctionalassessment;
 - d. Reliabilityandvalidityofvariousfunctionalassessments.
- 15. Evaluation of aging





ADVANCEDPHYSIOTHERAPEUTICS (FPM110203)

- 1. Pain:Neurobiology, Varioustheories, Modulation and Physiotherapy Management including Electromagnetic radiations, ultrasound, Electroacupuncture etc.
- 2. Maternalandchildcareingeneralphysiotherapy.
- 3. Appliedneuro-anatomyandneuro-physiotherapy.
- 4. Inhibitionandfacilitationtechniques.
- 5. Theoriesofmotorlearning.
- 6. Therapeuticbiofeedback&psychosomatictraining.
- 7. Combinationtherapy, shockwavetherapy, longwavetherapy.
- 8. Functionaltraining—
 Respiratoryexercises, Trainingforfeeding, bladderand boweltraining, coughing and compression.
- 9. Artificialrespiration,inhalationtherapy&intensivecare unitprocedures.
- 10. Yogasanas&Pranayama
 - Physiological&therapeuticprinciplesofyoga
 - Yogasanasforphysicalculture, relaxation and meditation.





- ApplicationofYogasanasinphysicalfitness,flexi bility,cardiacrehabilitationandneuromotorlearn ing.
- Pranayamaandrespiratoryphysiology.
- Kriyas and their physiological significance.
 Therapeuticapplicationofyoga.
- Yoga-aholisticapproach.
- 11. Acupuncture:definition,principles,techniques,physiolo gicaleffects,indications, contra- indications, dangers & integrationofacupuncturewithphysiotherapy.
- 12. Magnetotherapy.
- 13. Naturopathy
- 14. DryNeedlinginvarious conditions
- 15. History of manual therapy, overview of manual therapy approaches for all the joints
- 16. ClinicalReasoninganddifferentialclinicaldiagnosisandp racticalapplicationofdifferentapproachessuchas— Maitland,Kaltenborne,Cyriax,MulliganandMckenzie.
- 17. Softtissueapproaches:MyofascialReleasetechniques,Neural







tissuemobilization, Muscle Energy Techniques (MET), Position practical application.

- 18. Massage, mobilization and manipulations.
- 19. Ergonomics
- 20. RecentadvancesandEvidencebasedPracticeinallphysiotherapeuticconditions.
- 21. Physiotherapyincommonconditionsofskin.
- 22. Physiotherapyincommonvasculardiseases.
- 23. Physiotherapyinnutritionaldeficiencydiseases.
- 24. Physiotherapyinrespiratorydisorders.
- 25. PhysiotherapyManagementofischemicheartdiseases.
- 26. Exerciseplanningandprescriptions.
- 27. Physiotherapyinpsychiatry.
- 28. ManagementofpaininneurologicalandMusculoskeletaldisorders.
- 29. Physiotherapymanagementinarthritisandalliedconditions.
- 30. Monitoringsystems, defibrillator and Artificial respirators.
- 31. Physiotherapy in post-operative management ofmetabolic, hormonal, no
- 32. Preandpost-operative physiotherapy intendontransfer.







- 33. Physiotherapymanagementfollowingheadinjuries,inin tensivecareandneurosurgicalprocedures.
- 34. Physiotherapyfollowinggeneralsurgery.
- 35. Physiotherapyfollowinguro-surgery.
- 36. Physiotherapyfollowingplasticsurgery.
- 37. Physiotherapymanagementfollowingselectiveandc ommoncasesofoncologicsurgeries
- 38. Physiotherapyfollowingobstetricandgynecologicaldisorders.

PAPER: ELECTIVE SUBJECT

1. ORTHOPAEDICS (FPM110204) Objectives:

This course shall enablethe candidate to establish first contactphysiotherapy for the management of Musculoskeletal disorders andpain, expertiseintheskillsofmanualmedicine,advancedelectrodiagnostic/therapeuticskillsandabilitytofunctionasaconsultantinth

eteam of health profession als concerned with sports sciences, handreh

abilitation, geriatrichealth and industrial setup.

Thesubspecialtiesare

a. Advancesinmanualmedicineandpainmanagement





- b. Rehabilitation of hand
- c. Sportssciences
- d. Industrialhealthandergonomics
- e. Geriatrichealth
- f. Appliedbio-mechanicsandbio-engineering

SYLLABUS

- 1. Anatomy&physiologyofMusculoskeletalsystem.
- 2. BiomechanicsofnormaljointsandPathomechanicsoffracture s&deformed joints.
- 3. Introduction, principlesandconceptsof patient history, observation, examination, principles, scanning examination, examination of specificjoints, functional assessment, specific tests, reflexes, cutaneo us distribution, joint play movements, palpation and diagnostic imaging of spine & peripheral joints.
- 4. Functionalassessment(Handfunction,Gait,Posture,ADL,Occupationalwork)
- 5. Kineticandkinematicsanalysis
- 6. Assessment & Management of locomotor impairments,







- disabilities and Disability evaluation.
- 7. Clinicalsymptomatology,pathophysiology,pathome chanics&Physiotherapymanagementofmusculoskel etalconditions.
- 8. Pre operative and post operative assessment & management followingorthopaedicsurgeries.
- 9. Analysisandclassificationofsportsandsportsinjuries. Assessm ent&Management ofsportsinjuries, sportsfitness.
- 10. RehabilitationofHand&Paediatricmusculoskeletaldisorders.

Rheumatology:Rheumatoidarthritis,SLE,juvenilerheumatoidarthritis

- 11. Orthopaedicimplants:designs,materials,indications,postoperati veassessmentsand training.
- 12. Orthosis, Prostheses, Mobilityaids & adaptive devices in musculoskeletal problems: prescription, biomechanical compatibility, check out and training.
- 13. Physiotherapeuticapproachesinmusculoskeletalconditions:
 - Manualtherapyapproaches:
 - Softtissuemobilizationsandmanipulations
 - Neuralmobilizations, acupressure
 - Jointmobilizationsandmanipulation-





Peripheraljointsandvertebraljoints.

- Therapeuticexercises
 commonlyusedinmusculoskeletalconditionsinclu
 dingcorrectionexercisesandhomeexercises
- Pilatesandcorestabilityexercises
- ProprioceptiveNeuromuscularFacilitation(PNF)
- Hydrotherapyincommonmusculoskeletalconditions
- Swissballexercises
- Taping, Wrapping and Bracing techniques.
- 14. Neurological complications of locomotor disorders, conservative

 Electrodiagnosis, electromyographyandevokedpotential studies. (specifi
- 15. IndustrialhealthandErgonomics

cdiseaseoriented)

- 16. Geriatrichealth
- 17. RecentadvancesinOrthopedicPhysiotherapy.
- 18. Communitybasedrehabilitationinmusculoskeletalconditions
- 19. EvidencebasedphysiotherapymanagementfordifferentMusculoskeletalconditions.





COURSE OUTCOME:

CODE: FPM110201BASIC SCIENCES

CO1:Apply knowledge of basic sciences to analyze appropriate physiotherapeutic interventions, showcasing the ability to transfer theoretical knowledge to practical situations.

CO2: Critically evaluate research studies in the basic sciences of physiotherapy, identifying methodologies, interpreting results, and drawing conclusions to inform evidence-based practice.

CO3:Integrate information from various basic science disciplines to develop comprehensive treatment plans, illustrating the synthesis of knowledge for effective patient care.

CO4:Assess the efficacy of different physiotherapeutic approaches based on their understanding and proposing modifications for continuous improvement in patient care.

CODE: FPM110202PHYSICAL AND FUNCTIONAL DIAGNOSIS

CO1:Interpret diagnostic data, integrating information from multiple sources to identify underlying pathology, contributing factors, and potential treatment implications.

CO2: learn the assessment of various conditions through appropriate and valid tools.

CO3: Plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems and in various medical and surgical conditions.

CO4: Frame comprehensive management of physical ailments to develop independent professional knowledge and skill

CODE: FPM110203 ADVANCED THERAPEUTICS

CO1:Analyze the effectiveness of different advanced therapeutic modalities, considering patient responses, potential risks, and benefits.

CO2: Recall the underlying theories, principles, and evidence supporting their application in physiotherapy.

CO3: Evaluate the outcomes of advanced therapeutic interventions, considering both short-term and long-term effects on patient function and quality of life.

CO4: Apply advanced therapeutic interventions, selecting and implementing appropriate techniques based on a thorough assessment and individualized treatment goals.





CODE: FPM110204 NEURO SCIENCES

CO1: Advanced understanding of the changing knowledge base in neurology, and the international context and sensitivities of the area.

CO2:Acquire knowledge about the developmental processes in the nervous system, sensorimotor systems and the processing of sensory information, the programming and execution of movement, mechanisms of plasticity, learning and recovery of function after injury, higher cortical functions and their disorders following brain injury.

CO3: Manage competing demands on time, including self-directed project work.

CO4: Articulate their knowledge, understanding and managing neurological patients.

	FPM110201 BASIC SCIENCES									
				РО						
со	PO1 KNOWLEDGE	PO2 LEARNING SKILLS	PO3 PROFESSIONAL ETHICS	PO4 ANALYTIC SKILLS	PO5 SOCIAL AWARENESS	PO6 LIFE LONG LEARNING	PSO1	PSO2		
CO1	3	2	2	2	1	1	2	3		
CO2	2	1	2	3	2	2	2	1		
CO3	3	3	3	3	3	3	3	2		
CO4	2	3	3	3	3	3	3	2		

	FPM110202 PHYSICAL AND FUNCTIONAL DIAGNOSIS									
				РО						
со	PO1 KNOWLEDGE	PO2 LEARNING SKILLS	PO3 PROFESSIONAL ETHICS	PO4 ANALYTIC SKILLS	PO5 SOCIAL AWARENESS	PO6 LIFE LONG LEARNING	PSO1	PSO2		
CO1	3	2	1	3	3	2	2	2		
CO2	3	3	2	1	1	1	1	2		
CO3	1	1	2	2	3	3	3	3		
CO4	2	2	3	1	3	3	2	1		







	FPM110203 ADVANCED THERAPEUTICS										
				РО							
СО	PO1 KNOWLEDGE	PO2 LEARNING SKILLS	PO3 PROFESSIONAL ETHICS	PO4 ANALYTIC SKILLS	PO5 SOCIAL AWARENESS	PO6 LIFE LONG LEARNING	PSO1	PSO2			
CO1	2	1	2	2	2	1	2	2			
CO2	3	3	2	1	2	2	1	2			
CO3	2	3	2	3	3	3	3	3			
CO4	3	2	3	3	3	3	2	3			

	FPM110204 NEURO SCIENCES									
				РО						
СО	PO1 KNOWLEDGE	PO2 LEARNING SKILLS	PO3 PROFESSIONAL ETHICS	PO4 ANALYTIC SKILLS	PO5 SOCIAL AWARENESS	PO6 LIFE LONG LEARNING	PSO1	PSO2		
CO1	3	2	2	3	2	3	2	1		
CO2	3	3	1	2	2	3	2	2		
CO3	2	2	2	3	3	1	1	1		
CO4	3	1	3	2	3	3	3	3		



