



INTEGRAL UNIVERSITY, LUCKNOW

INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH

DEPARTMENT OF PHYSIOTHERAPY

BACHELOR OF PHYSIOTHERAPY

**(BPT)
SYLLABUS**

YEAR/ SEMESTER: IV/VII



Integral University, Lucknow
Department of Physiotherapy
Study and Evaluation Scheme

Program: BPT

Semester-VII

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
THEORIES													
1	PT401	Orthopedics Physiotherapy -I	Core	3	1	0	40	20	60	40	100	3:1:0	4
2	PT402	Neuro Physiotherapy	Core	3	1	0	40	20	60	40	100	3:1:0	4
3	PT403	Cardiopulmonary Physiotherapy	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	PT404	Research & Biostatistics in Physiotherapy	Core	2	1	0	40	20	60	40	100	2:1:0	3
PRACTICAL													
1	PT405	Orthopedics Physiotherapy - I Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
2	PT406	Neuro Physiotherapy - Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
3	PT407	Cardiopulmonary Physiotherapy -Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
4	PT408	Seminar on Clinical Issues	Core	0	2	0	25	25	50	00	50	0:2:0	2
5	PT409	Clinical Training	Core	0	0	10	25	25	50	00	50	0:0:5	5
Total				11	06	22	330	190	520	280	800	28	28

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Goa (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES											
1	PT401	Orthopedics Physiotherapy -I	Core	√	√	√			√	√	3,4
2	PT402	Neuro Physiotherapy	Core	√	√	√			√	√	3,4
3	PT403	Cardiopulmonary Physiotherapy	Core	√	√	√			√	√	3,4
4	PT404	Research & Biostatistics in Physiotherapy	Core	√	√	√			√	√	3,4,9
PRACTICAL											
1	PT405	Orthopedics Physiotherapy - I Lab	Core	√	√	√			√	√	3,4
2	PT406	Neuro Physiotherapy - Lab	Core	√	√	√			√	√	3,4,9
3	PT407	Cardiopulmonary Physiotherapy -Lab	Core	√	√	√			√	√	3,4,9
4	PT408	Seminar on Clinical Issues	Core	√	√	√			√	√	3,4,9, 17
5	PT409	Clinical Training	Core	√	√	√			√	√	3,4,11

L: Lecture **T:** Tutorials **P:** Practical **CT:** Class Test **TA:** Teacher Assessment **ESE:** End Semester Examination,
 AE= Ability Enhancement, DSE- Discipline Specific Elective, **Sessional Total:** Class Test + Teacher Assessment
Subject Total: Sessional Total + End Semester Examination (ESE)



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT401	Title of the Course	ORTHOPAEDICS PHYSIOTHERAPY-I	L	T	P	C
Year	IV	Semester	VII	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The student will be able to plan & prescribe short-term & long-term Physiotherapy treatment by selecting appropriate modes of evaluation and intervention in case of various Orthopedic conditions for the relief of pain, healing, restoration / maintenance of function & maximum functional independence.						

Course Outcomes	
CO1	To understand the traumatology of upper limb fractures with their management with their special test.
CO2	To understand the traumatology of lower limb, spine and pelvis fractures with their management with their special test.
CO3	To understand the management of various orthopedic surgeries and post-surgery management.
CO4	To understand the pathophysiology of amputation with its assessment and treatment protocol.
CO5	To understand the assessment and management of various bone and joint infections & bone tumor.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	PHYSIOTHERAPY APPROACH IN UPPER LIMB TRAUMA	Basic concepts of Physiotherapy Assessment and management of upper limb fractures, Dislocation and soft tissue lesion during immobilization and mobilization phase.	8	CO1
2	PHYSIOTHERAPY APPROACH IN LOWER LIMB AND SPINE TRAUMA	Basic concepts of Physiotherapy Assessment and management of Lower limb and Spine fractures, Dislocation and soft tissue lesion during immobilization and mobilization phase	8	CO2
3	PHYSIOTHERAPY APPROACH TOWARDS ORTHOPEDIC SURGERIES	Physiotherapy Assessment and management of- 1. Arthroplasty and Arthroscopy, 2. Osteotomy, Arthrodesis 3. Bone Grafting, Muscle tendon and nerve surgeries 4. Spinal Surgeries	8	CO3
4	PHYSIOTHERAPY IN AMPUTATION	Pre and post operative assessment and Goals of management. Level of amputation of upper limb and lower limb. Stump care, Bandaging, Pre and post prosthetic management. Complication of amputation and their management.	8	CO4
5	PHYSIOTHERAPY IN BONE AND JOINT INFECTION AND BONE TUMORS	Function Based Physiotherapy assessment and management of: 1. Bone infection 2. Joint infection 3. Bone tumors	8	CO5

Reference Books:

1. Cash Text books of Orthopedics and Rheumatology for physiotherapist Jaypee Publication
2. Neuromusculoskeletal Examination and assessment fourth edition by Nicola J. Petty Churchill Livingstone
3. Orthopedic physical assessment third and fifth Edition by David J Magee.
4. Essential Orthopedics third Edition by Maheshwari Mehta publishers.

e-Learning Source:

1. <https://youtu.bae/XJrRsMCEmp8>
2. <https://youtu.bae/XJrRsMCEmp8>
3. <https://youtu.be/U49922kHUcIk>
4. <https://youtu.be/eITZWAAoWfY10>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	3	2	3	-	-	1	-	2	1	2	3	3	2	3	1
CO2	2	3	3	3	3	-	-	-	-	3	1	3	3	3	2	2	1
CO3	2	2	3	2	3	-	-	-	-	3	-	2	3	3	3	3	-
CO4	1	3	3	3	3	-	1	1	-	2	1	3	3	3	2	3	-
CO5	1	3	3	3	3	-	1	1	-	3	2	3	3	3	3	2	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT401	ORTHOPAEDICS PHYSIOTHERAPY-I	Empl yability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√			√	√	3,4



Integral University, Lucknow

Integral University, Lucknow							
Effective from Session: 2023-24							
Course Code	PT402	Title of the Course	NEUROPHYSIOTHERAPY	L	T	P	C
Year	IV	Semester	VII	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The objective of this course is that, the student will be able to identify disability due to neurological dysfunction, set treatment goals and apply their skill. Able to plan realistic goal based on the knowledge of prognosis of the diseases of the nervous system and prescribe appropriate, safe evidence-based physiotherapy intervention.						

Course Outcomes	
CO1	To understand the importance of clinical reasoning related to advance interventional strategies like Motor control & Motor Learning, NDT (Bobath approach), Neuroplasticity, MRP for neurological conditions.
CO2	To understand about the assessment and management of pediatric neurological conditions like Cerebral palsy and Muscular dystrophy.
CO3	To understand about the assessment and management of neurological conditions like stroke, meningitis, encephalitis, and poliomyelitis
CO4	To understand about the assessment and management of degenerative and demyelinating conditions like Parkinson's, ataxia and Guillain – Barre syndrome.
CO5	To understanding about the assessment and management of various traumatic injuries of spinal cord and nerves with its complication.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	NEURO-PHYSIOTHERAPY TECHNIQUES	Neurophysiotherapy Techniques: 1. Motor control 2. Motor Learning, 3. NDT (Bobath approach), 4. Neuroplasticity, 5. MRP 6. Brief about Robotics concept	8	CO1
2	PHYSIOTHERAPY IN PEDIATRIC CONDITIONS	PT assessment and management of: 1. Cerebral Palsy 2. Muscular dystrophy 3. Hydrocephalus	6	CO2
3	PHYSIOTHERAPY IN CVA & INFECTIOUS CONDITIONS	PT assessment and management of: 1. Cerebrovascular Accident (CVA) 2. Brain Tumors 3. Meningitis, Encephalitis 4. Poliomyelitis: Post-polio residual paralysis (PPRP)	10	CO3
4	PHYSIOTHERAPY IN DEGENERATIVE & DEMYELINATING CONDITIONS	PT assessment and management of: 1. Parkinson Disease, 2. Ataxia 3. GBS (Guillain – Barre syndrome) 4. Motor Neuron Diseases 5. Multiple Sclerosis	8	CO4
5	PHYSIOTHERAPY IN TRAUMATIC CONDITIONS	PT assessment and management of: 1. Traumatic Brain Injury 2. Spinal Cord Injury (SCI) 3. Peripheral Nerve Injury (PNI)	8	CO5

Reference Books:

1. Physical rehabilitation – Susan O` Sullivan, 5th edition
2. Neurological Rehabilitation – D. A. Umphred, 6th edition
3. Physical medicine and rehabilitation – Braddom, 3rd edition
4. Cash's Text Book for Physiotherapists In Neurological Disorders – 4th edition

e-Learning Source:

1. <https://youtu.bae/XJsrRrMCEmp8>
2. <https://youtu.bae/XJrRrMxrCEmp8>
3. <https://youtu.bae/XJrRrMxrCEmp8>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	2	2	3	-	-	1	-	2	1	2	3	3	3	-	1
CO2	1	3	3	3	3	-	-	-	-	2	1	3	3	3	2	-	1
CO3	2	2	3	3	3	-	-	-	-	3	-	3	3	3	3	3	-
CO4	1	3	3	3	3	-	1	1	-	2	1	3	3	3	2	3	-
CO5	1	3	3	3	3	-	1	1	-	3	2	3	3	3	3	2	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT402	NEUROPHYSIOTHERAPY	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√			√	√	



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT403	Title of the Course	CARDIOPULMONOLOGY PHYSIOTHERAPY	L	T	P	C
Year	IV	Semester	VII	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The objective of this course is that after lectures and demonstration in addition to clinics the student will be able to demonstrate an understanding of Cardio-thoracic conditions causing disability and their management.						

Course Outcomes	
CO1	To understand the importance of cardiopulmonary anatomy and physiology about structure, course and function of alveoli, different tracts of respiratory pathways and regulations of cardiopulmonary system
CO2	Develops the skills to execute different Physiotherapy techniques used in treatment of Cardio-respiratory dysfunctions.
CO3	To select strategies for cure, care & prevention; adopt restorative & rehabilitative measures for maximum possible functional independence of a patient at intensive care unit.
CO4	Be able to execute the effective Physiotherapeutic measures with appropriate clinical reasoning to improve pulmonary function.
CO5	To design & execute effective tailored cardiopulmonary post-surgical rehabilitation program.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	PHYSICAL ASSESSMENT IN CARDIORESPIRATORY DYSFUNCTION	1. Inspection: a. Assessment of Cardio-Vascular and Respiratory system. b. Breathing pattern (rate, rhythm, use of accessory muscles), c. Chest deformity (Barrel chest, pigeon chest), Spinal deformity (scoliosis, kyphosis, kyphoscoliosis), d. Sputum (color, types), Cough (types, productive/non-productive). 2. Palpation: a. Tactile and vocal fremitus, mobility of thoracic spine and rib cage. b. Percussion: Dullness and hyper resonance. c. Auscultation: Normal and abnormal breath sounds. d. Chest expansion at different levels (auxiliary, nipple & xiphoid) e. Chest symmetry	8	CO1
2	PHYSICAL ASSESSMENT AND INVESTIGATIONS IN CARDIORESPIRATORY DYSFUNCTION	Investigations a. Exercise tolerance test b. ABG analysis, c. Electrocardiography, 2-D Echography f. TMT g. Pulmonary Function Test h. Radiological Examinations (X-ray, CT scan, CT Angio)	8	CO2
3	GENERAL AND INTENSIVE CARE PHYSIOTHERAPY	1. Postural drainage 2. Mechanical ventilation: IPPB, PEEP, CPAP, Bi-PAP, SIMV 3. Aerosol Therapy, Humidifiers and nebulizer 4. Principles of intensive care therapy. Knowledge of the equipment's and monitoring (a) Endotracheal tubes, tracheostomy tubes, suction pump (b) Vitals monitoring 5. General Physiotherapy Management (a) Positioning: Prone, side lying, supine, long sitting, upright or standing (b) Airway Clearance techniques: ACBT and Autogenic Drainage	8	CO3
4	PHYSIOTHERAPY IN OBSTRUCTIVE AND RESTRICTIVE LUNG DISEASES	1. Physiotherapy techniques to decrease work of breathing a. Energy Conservation b. Breathing re-education – Breathing control techniques c. Graduated exercise programme and posture correction. d. Mechanical aids –Incentive Spirometry, PEP Devices & IPPB 2. Physiotherapy techniques to increase lung volume a. Chest mobility exercises b. Neuro-physiological Facilitation of Respiration	8	CO4
5	PHYSIOTHERAPY AFTER PULMONARY AND CARDIAC SURGERY	1. Breathing exercises, huffing and coughing, 2. Arm exercises, Ankle Pump Exercise, 3. Trunk Control Exercises, Posture Correction Technique 4. Pulmonary Rehabilitation 5. Cardiac Rehabilitation	8	CO5

Reference Books:

1. Cash's Text Book for Physiotherapists in Chest, Heart & Vascular Diseases, Publisher: Mosby
2. Cardiovascular And Pulmonary Physical Therapy Evidence to Practice: Donna Frown felter, Elsevier
3. Physiotherapy for Respiratory and Cardiac Problems: Jennifer & Ammani, Churchill Livingstone/Elsevier.
4. Clinical Application of Mechanical Ventilation, CENGAGE Learning

e-Learning Source:

1. <https://youtu.be/Bt0axxrpDItd8>
2. <https://youtu.be/hpwnnlr-ZHB0>
3. <https://youtu.be/KHvfdKyw2I8>
4. <https://youtu.be/KHxrtvfdKyw2I8>

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	-	1	1	-	-	-	-	1	-	2	-	-	-	-	1
CO2	2	3	-	1	1	-	-	-	-	1	-	3	-	-	-	1	-
CO3	1	2	2	2	3	1	2	1	-	2	1	3	3	3	3	3	1
CO4	2	2	3	3	3	-	1	1	1	3	1	3	2	3	3	2	1
CO5	1	2	3	3	3	-	1	1	-	3	1	3	3	3	3	3	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs		Attributes							SDGs No.	
Course Code	Course Title	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics		
PT403	CARDIOPULMONARY PHYSIOTHERAPY	√	√	√			√	√	3,4	



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT404	Title of the Course	RESEARCH & BIostatISTICS IN PHYSIOTHERAPY	L	T	P	C
Year	IV	Semester	VII	2	1	0	3
Pre-Requisite	Nil	Co-requisite	Nil	The objective of this module is to help the students understand the basic principles of research and methods applied to draw inferences from the research findings.			
Course Objectives							

Course Outcomes	
CO1	To understand the importance of research in the relative field. Understand the basic concepts and methods of research.
CO2	To interpret differences in data distributions via visual displays. Calculate standard normal scores and resulting probabilities
CO3	To calculate and interpret confidence intervals for population means and proportions. Interpret and explain a p-value.
CO4	To perform a two-sample t-test and interpret the results; calculate a 95% confidence interval for the difference in population means.
CO5	To select an appropriate test for comparing two populations on a continuous measure, when the two-sample t-test is not appropriate.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	INTRODUCTION OF RESEARCH METHODOLOGY	Introduction to Research methodology. Review of Literature and its importance-Different methods to review the literature. Research design. (Case study / report, Case series) Measurement & scaling techniques.	6	CO1
2	COLLECTION OF DATA	Methods of data collection: Primary and secondary source of information, collection of primary data, collection data through questionnaires & schedules, Difference between questionnaires & schedules. Sampling: Definition and types. Sample size calculation, Power analysis.	6	CO2
3	DESCRIPTIVE STATISTICS-I	Introduction: Meaning, definition, characteristics of statistics. Importance of the study of statistics, Branches of statistics, Statistics and health science, Tabulation of Data: Basic principles of graphical representation. Measures of Central tendency. Measures of Dispersion. Skewness, kurtosis.	6	CO3
4	DESCRIPTIVE STATISTICS- II	Probability and standard distributions the binominal distribution, the normal distribution, Skewness, kurtosis. Karl Pearson & Spearman's Correlation & correlation coefficient Linear and multiple regressions.	6	CO4
5	INFERENTIAL STATISTICS	Testing of Hypotheses Procedure, Null and Alternative hypothesis, Level of significance, Degrees of freedom Parametric and Nonparametric Tests. Statistical software for analysis	6	CO5

Reference Books:

1. B.K. Mahajan, Methods in Biostatistics, Jaypee.
2. P.N. Arora: Biostatistics & Research methodology
3. Dr J. A. Khan: Biostatistics & Research methodology, APH Publishing.
4. Hicks: Research methodology, Churchill Livingstone
5. Research methods for clinical therapist: Carolyn M Hicks

e-Learning Source:

1. <https://youtu.be/w1LRtqBQ45tfcQ>
2. <https://youtu.be/PhLSDngxLp-M>
3. <https://youtu.be/PhLSDxtmxLp-M>
4. <https://youtu.be/EWyxvY48NApG8>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	-	-	-	1	1	3	-	1	-	-	-	3	1
CO2	-	-	-	-	-	-	-	-	-	3	1	2	-	-	-	2	1
CO3	-	-	-	-	-	-	-	-	1	3	-	1	-	-	-	3	-
CO4	-	-	-	-	-	-	-	1	-	3	1	-	-	-	-	3	-
CO5	-	-	-	-	-	-	-	-	-	3	1	-	-	-	-	3	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Course Code	Course Title	Attributes							SDGs No.	
PT404	RESEARCH & BIOSTATISTICS IN PHYSIOTHERAPY	Empl yability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4,9	
		√	√	√			√	√		



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT405	Title of the Course	ORTHOPAEDICS PHYSIOTHERAPY-I LAB	L	T	P	C
Year	IV	Semester	VII	0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The student will be able to plan & prescribe short-term & long-term Physiotherapy treatment by selecting appropriate modes of evaluation and intervention in case of various Orthopedic conditions for the relief of pain, healing, restoration / maintenance of function & maximum functional independence.						

Course Outcomes	
CO1	To understand the traumatology of upper limb fractures with their management with their special test.
CO2	To understand the traumatology of lower limb, spine and pelvis fractures with their management with their special test.
CO3	To understand the management of various orthopedic surgeries and post-surgery management.
CO4	To understand the Pathophysiology of various musculoskeletal conditions, congenital and acquired anomalies with its assessment and treatment protocol.
CO5	Demonstrate an understanding of orthopedic conditions causing disability, clinical features and methods of investigations and management.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	PHYSIOTHERAPY APPROACH IN UPPER LIMB TRAUMA	Physiotherapy assessment and management of upper limb fractures during immobilization and mobilization phase. Physiotherapy assessment and management of upper limb dislocations and soft tissue. Injury during immobilization and mobilization phase.	8	CO1
2	PHYSIOTHERAPY APPROACH IN LOWER LIMB AND SPINE TRAUMA	Physiotherapy assessment and management of lower limb fractures during immobilization and mobilization phase. Physiotherapy assessment and management of lower limb dislocations during. Immobilization and mobilization phase. Physiotherapy assessment and management of lower limb soft tissue injuries. Physiotherapy assessment and management of spine and pelvis fracture during. Immobilization and mobilization phase.	8	CO2
3	PHYSIOTHERAPY APPROACH TOWARDS ORTHOPEDIC SURGERIES	Demonstration of post operative rehabilitation of Arthroplasty and Arthroscopy, Osteotomy, Arthrodesis and Bone Grafting, Muscle tendon and nerve surgeries, Spinal Surgeries	8	CO3
4	PHYSIOTHERAPY IN AMPUTATION	Pre and post operative assessment and Goals of management. Level of amputation of upper limb and lower limb. Stump care, Bandaging, Pre and post prosthetic management. Complication of amputation and their management.	8	CO4
5	PHYSIOTHERAPY IN BONE AND JOINT INFECTION AND BONE TUMORS	Physiotherapy assessment and management of bone infection on the basis of physical and functional diagnosis. Physiotherapy assessment and management of joint infection on the basis of physical and functional diagnosis. Physiotherapy assessment and management of bone tumors on the basis of physical and functional diagnosis.	8	CO5

Reference Books:

1. Cash Text books of Orthopedics and Rheumatology for physiotherapist Jaypee Publication
2. Neuromusculoskeletal Examination and assessment fourth edition by Nicola J. Petty Churchill Livingstone
3. Orthopedic physical assessment third and fifth Edition by David J Magee.
4. Essential Orthopedics third Edition by Maheshwari Mehta publishers.

e-Learning Source:

1. <https://youtu.bae/XJrRrMCemp8>
2. <https://youtu.bae/XJrRrMCemp8>
3. <https://youtu.be/U49922kHUclK>
4. <https://youtu.be/eITZWAAoWfY10>

	Course Articulation Matrix: (Mapping of COs with POs and PSOs)																
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	3	2	2	-	-	1	-	2	1	2	3	2	2	3	1
CO2	2	3	2	3	3	-	-	-	-	3	1	3	3	3	2	2	1
CO3	2	2	3	2	2	-	-	-	-	3	-	2	2	3	3	3	-
CO4	1	3	3	3	3	-	1	1	-	2	1	3	3	3	2	3	-
CO5	1	3	3	3	3	-	1	1	-	3	2	3	3	3	3	2	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT405	ORTHOPAEDICS PHYSIOTHERAPY-I LAB	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√	√		√	√	



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT406	Title of the Course	NEUROPHYSIOTHERAPY LAB	L	T	P	C
Year	IV	Semester	VII	0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The student will be able to conduct a safe and effective rehabilitation program with advance rehabilitation techniques on the patient with neurological conditions.						

Course Outcomes	
CO1	Know about the identification and analyze movement dysfunction due to neuromuscular skeletal disorders in terms of biomechanical and biophysical basics correlate the same with health condition.
CO2	Understand the routine electro physiological, radiological, and biochemical investigation and arrive at appropriate physical therapy diagnosis using WHO – ICF with clinical reasoning.
CO3	Able to plan realistic goal based on the knowledge of prognosis of the diseases of the nervous system and prescribe appropriate, safe evidence-based physiotherapy intervention.
CO4	Understand infection control principles, best practices, and techniques applicable to a range of setting where client with neurological conditions.
CO5	Identify disability due to neurological dysfunction, set treatment goals and apply their skills in exercise therapy, electrotherapy, and massage in clinical situation to restore neurological function.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	NEUROPHYSIOLOGICAL TECHNIQUES	NDT, PNF, Rood's Sensorimotor Approach, Brunnstorm movement therapy, Motor relearning program.	10	CO1
2	PEDIATRIC NEUROLOGY	Developmental milestones, developmental reflexes	6	CO2
3	NEUROLOGICAL ASSESSMENT	Higher mental function examination, Motor & Sensory examination, Reflex testing, Balance & Coordination examination, Functional analysis	8	CO3
4	MANAGEMENT OF NEUROLOGICAL CONDITIONS	Neuro-rehabilitation, Function re-education, intensive care management, pediatric and geriatric management	10	CO4
5	ASSESSMENT AND MANAGEMENT OF NEUROLOGICAL GAITS	Quantitative and Qualitative (Kinetic & Kinematics) analysis, List of Problems, short-term & long-term goals, Management of Neurological Gaits, ambulation, and wheel chair transfer.	6	CO5

Reference Books:

1. Physical rehabilitation – Susan O' Sullivan, 5th edition
2. Neurological Rehabilitation – D. A. Umphred, 6th edition
3. Physical medicine and rehabilitation – Braddom, 3rd edition
4. The neurological examination – De Myer's, 6th edition

e-Learning Source:

1. <https://youtu.be/QDntJgxt9Hhr8>
2. <https://youtu.be/yF8cdcxN0XTLk>
3. <https://youtu.be/L03LI34lbcIg>
4. <https://youtu.be/NjL0P6JxVpEs>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	2	2	3	-	-	1	-	3	1	2	3	2	3	-	1
CO2	1	3	3	3	3	-	-	-	-	2	1	3	3	3	2	-	1
CO3	2	2	3	2	3	-	-	-	-	3	-	3	2	3	3	3	-
CO4	1	3	3	3	3	-	1	1	-	2	1	3	3	3	2	3	-
CO5	1	3	3	3	3	-	1	1	-	3	2	3	3	3	3	2	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Course Code		Course Title		Attributes & SDGs							SDGs No.	
				Attributes								
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics		
PT406		NEUROPHYSIOTHERAPY LAB		√	√	√			√	√	3,4,9	



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT407	Title of the Course	CARDIOPULMONARY PHYSIOTHERAPY LAB	L	T	P	C
Year	IV	Semester	VII	0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The objective of this course is that after lectures and demonstration in addition to clinics the student will be able to demonstrate an understanding of Cardio-thoracic conditions causing disability and their management.						

Course Outcomes	
CO1	To understand the importance of cardiopulmonary anatomy and physiology about structure, course and function of alveoli, different tracts of respiratory pathways and regulations of cardiopulmonary system
CO2	Develops the skills to execute different Physiotherapy techniques used in treatment of Cardio-respiratory dysfunctions.
CO3	To select strategies for cure, care & prevention; adopt restorative & rehabilitative measures for maximum possible functional independence of a patient at intensive care unit.
CO4	Be able to execute the effective Physiotherapeutic measures with appropriate clinical reasoning to improve pulmonary function.
CO5	To design & execute effective tailored cardiopulmonary post-surgical rehabilitation program.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	PHYSICAL ASSESSMENT IN CARDIORESPIRATORY DYSFUNCTION	1. Inspection: a. Assessment of Cardio-Vascular and Respiratory system. b. Breathing pattern (rate, rhythm, use of accessory muscles), c. Chest deformity (Barrel chest, pigeon chest), Spinal deformity (scoliosis, kyphosis, kyphoscoliosis) d. Cough (types, productive/non-productive). 2. Palpation: a. Tactile and vocal fremitus, mobility of thoracic spine and rib cage. b. Percussion: Dullness and hyper resonance. c. Auscultation: Normal and abnormal breath sounds. d. Chest expansion at different levels (auxiliary, nipple & xiphoid) e. Chest symmetry	8	CO1
2	PHYSICAL ASSESSMENT AND INVESTIGATIONS IN CARDIORESPIRATORY DYSFUNCTION	Understanding and interpretation of Investigations: a. Exercise tolerance test b. ABG analysis, c. Electrocardiography e. 2-D Echography f. TMT g. Pulmonary Function Test h. Radiological Examinations (X-ray, CT scan, CT Angio)	8	CO2
3	GENERAL AND INTENSIVE CARE PHYSIOTHERAPY	Practical demonstration of: 1. Postural drainage 2. suction pump 3. Vitals monitoring 4. General Physiotherapy Management (a) Positioning: Prone, side lying, supine, long sitting, upright or standing (b) Airway Clearance techniques: ACBT and Autogenic Drainage	8	CO3
4	PHYSIOTHERAPY IN OBSTRUCTIVE AND RESTRICTIVE LUNG DISEASES	1. Physiotherapy techniques to decrease work of breathing a. Energy Conservation b. Breathing re-education – Breathing control techniques c. Graduated exercise programme and posture correction. d. Mechanical aids –Incentive Spirometry, PEP Devices & IPPB 2. Physiotherapy techniques to increase lung volume a. Chest mobility exercises b. Neuro-physiological Facilitation of Respiration	8	CO4
5	PHYSIOTHERAPY AFTER PULMONARY AND CARDIAC SURGERY	1. Breathing exercises, huffing and coughing, 2. Arm exercises, Ankle Pump Exercise, 3. Trunk Control Exercises 4. Pulmonary Rehabilitation 5. Cardiac Rehabilitation	8	CO5

Reference Books:

1. Cash's Text Book for Physiotherapists in Chest, Heart & Vascular Diseases, Publisher: Mosby
2. Cardiovascular And Pulmonary Physical Therapy Evidence to Practice: Donna Frown felter, Elsevier
3. Physiotherapy for Respiratory and Cardiac Problems: Jennifer & Ammani, Churchill Livingstone/Elsevier.
4. Clinical Application of Mechanical Ventilation, Cengage Learning

e-Learning Source:

1. <https://youtu.be/Bt0axxrpDITd8>
2. <https://youtu.be/hpwnnlr-ZHB0>
3. <https://youtu.be/KHvfdKyw2I8>
4. <https://youtu.be/KHxrtvfdKyw2I8>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
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CO																	
CO1	1	3	-	1	2	-	-	-	-	1	-	2	-	-	-	-	1
CO2	2	3	-	1	1	-	-	-	-	1	-	3	-	-	-	1	-
CO3	1	3	2	2	3	1	2	1	-	2	1	3	3	2	3	3	1
CO4	1	2	3	3	2	-	1	1	1	3	1	3	2	3	3	2	1
CO5	1	2	3	3	3	-	1	1	-	3	1	3	3	3	3	3	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

		Attributes & SDGs								
Course Code	Course Title	Attributes							SDGs No.	
		Employabil ity	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics		
PT407	CARDIOPULMONARY PHYSIOTHERAPY	√	√	√			√	√	3,4,9	



Integral University, Lucknow

Effective from Session: 2021-22							
Course Code	PT408	Title of the Course	SEMINAR ON CLINICAL ISSUES	L	T	P	C
Year	IV	Semester	VII	0	2	0	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	This course will serve as a platform for students to integrate various components of patient management and debate contentious issues in the efficacy of Physiotherapy techniques used in musculoskeletal, neurological, cardiopulmonary, & Sports rehabilitation as well as enhance presentation skills.						

Course Outcomes	
CO1	The students will understand and interpret latest advancements through different technical papers, reports, Journals, Data sheets, books etc
CO2	The students will inculcate the skills for literature survey and will learn to manage resources effectively.
CO3	The students will be able to summarize the recent research and technologies in the form of review and will be able to deliver power point presentations on an assigned topic.
CO4	The students will be able to communicate his/her ideas with his peers as audience, which will enhance both oral and written communication skills.
CO5	The students will be able to create interest to pursue lifelong learning.

SEMINAR PRESENTATION ASSESSMENTN FORM

Name of Student:		Session:	
Enrolment Number:		Date:	
Name of Subject:	Seminar on Clinical Issues	Subject code:	PT408
Topics:			

Criteria	Sub-Criteria	Max. Marks	Marks Obtained
Introduction (Max marks-05)	Use appropriate background information	02	
	Has clear statement of purpose	02	
	Shows a logical sequence	01	
Factual Content (Max marks- 10)	Includes accurate information	02	
	Shows up-to-date content	02	
	Presents relevant content	02	
	Shows in-depth and sufficient details	01	
	Addresses all important issues	01	
	Is selective	01	
	Use of proper English Grammar in the text	01	
Presentation Quality (Max marks-03)	Has a good design of presentation (appropriate font, type, size, color, matter per slide etc.)	02	
	Has a clear verbal expression and eye contact with audience	01	
Response to questions (Max marks-05)	Answers question(s) correctly	02	
	Has the ability to think on the spot	02	
	Shows an ability to defend content of presentation	01	
Time Management (Max. mark-02)	Completes the presentation within allocated time	02	
Total Marks		25	

Note: In case of Oral Presentation, each student will be assessed in a 20 minutes time (15 min for presentation & 5 min for discussion) out of 50 marks.

Comments/Suggestions:

(Name and signature of Incharge)

(Head, Physiotherapy)

EVALUATION OF SEMINAR ON CLINICAL ISSUES

BPT- Students has to prepare minimum 2 long case and 2 short cases during their seminar presentation during due course of time. The evaluation for internal clinical examination of 50 marks will be distributed:

Seminar Presentation=**25marks**.

Viva voce =**20 marks**

Attendance=**5 marks**

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
CO2	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
CO3	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
CO4	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
CO5	3	3	3	3	2	2	3	2	1	3	-	-	3	2	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Course Code	Course Title	Attributes							SDGs No.
PT408	SEMINAR ON CLINICAL ISSUES	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√			√	√	3,4,9, 17



Integral University, Lucknow

Effective from Session: 2021-22							
Course Code	PT409	Title of the Course	CLINICAL POSTING	L	T	P	C
Year	IV	Semester	VII	0	0	10	5
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	Students will engage in clinical practice in Physiotherapy departments in the musculoskeletal, neurology, cardiopulmonary, sports settings to enhance their clinical skills and apply contemporary knowledge gained during teaching sessions.						

Course Outcomes	
CO1	To learn the punctuality and interaction with colleague and supporting staff during clinical training.
CO2	To develop assessment skills.
CO3	To develop appropriate treatment protocol.
CO4	To understand the importance of documentation of the case record and case presentation.
CO5	To develop discipline and improve overall quality of clinical work.

CLINICAL POSTING ASSESSMENT FORM

Name of Student:		Session:	
Enrolment Number:		Date:	
Name of Subject:	Clinical Posting	Subject code:	PT409
Topics:			

S. No.	Point to be Considered	Max. Marks	Marks Obtained
1.	Punctuality	4	
2.	Interaction with colleagues and supporting staff	2	
3.	Maintenance of case records	3	
4.	Presentation of case during rounds	2	
5.	Investigation work up	2	
6.	Bedside Manners	2	
7.	Rapport with patients	2	
8.	Treatment approach & technique	3	
9.	Discipline	2	
10.	Overall quality of clinical work	3	
TOTAL SCORE		25	

(Name and signature of Incharge)

(Head, Physiotherapy)

GUIDELINES FOR CLINICAL TRAINING PROGRAM

The students of Post Graduate Physiotherapy program must spend above mentioned allotted time period in the hospital based clinical training for specified clinical experiences to meet the objectives of the training program. This period of practical and theoretical experience will enable the students to acquire competency and experience to perform as an independent practice and will enable to adjust to the real practical life in different units in the hospital settings.

S.No.	Program Name	Year/Semester	Duration of Training
1.	BPT	IIIrd Year/ Vth Semester	4 Months
2.		IIIrd Year/ VI th Semester	4 Months
3.		IVth Year/ VII th Semester	4 Months
4.		IVth Year/ VIII th Semester	4 Months

By the successful completion of this clinical training period, the student is expected to fulfil the objectives of the program and will be examination as given below:

S.No.	Program Name	Year/Semester	Case file	Practical on Case	Voice/Viva	Attendance
1.	BPT	IIIrd Year/ Vth Semester	10 Marks	10 Marks (1 Long Case and 2 Short Case)	25 Marks	5 Marks
2.		IIIrd Year/ VI th Semester				
3.		IVth Year/ VII th Semester				
4.		IVth Year/ VIII th Semester				

EVALUATION OF CLINICAL POSTING

BPT- Students has to prepare 1 long case and 2 short cases during their clinical posting. The evaluation for internal clinical examination of 50 marks will be distributed:

Cases during clinical posting=**20 marks**.

Viva voce=**25 marks**

Attendance=**5 marks**

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
CO2	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
CO3	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
CO4	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
CO5	3	3	3	3	2	2	3	2	1	3	-	-	3	2	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.	
PT409	CLINICAL POSTING	Employ ability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4,11	
		✓	✓	✓			✓	✓		



INTEGRAL UNIVERSITY, LUCKNOW

INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH

DEPARTMENT OF PHYSIOTHERAPY

BACHELOR OF PHYSIOTHERAPY

**(BPT)
SYLLABUS**

YEAR/ SEMESTER: IV/VIII



Integral University, Lucknow
Department of Physiotherapy
Study and Evaluation Scheme

Program: BPT

Semester-VIII

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
THEORIES													
1	PT410	Orthopedics Physiotherapy -II	Core	3	1	0	40	20	60	40	100	3:1:0	4
2	PT411	Sports Physiotherapy	Core	3	1	0	40	20	60	40	100	3:1:0	4
3	PT412	Community Based Rehabilitation in Physiotherapy	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	PT418	Artificial Intelligence In Physiotherapy	Audit	2	1	0	00	00	00	100	100	0:0:0	0
PRACTICAL													
1	PT413	Orthopedics Physiotherapy - II Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
2	PT414	Sports Physiotherapy – Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
3	PT415	Project	Core	0	4	0	40	20	60	40	100	0:4:0	4
4	PT416	Seminar on Clinical Issues	Core	0	2	0	25	25	50	00	50	0:2:0	2
5	PT417	Clinical Training	Core	0	0	10	25	25	50	00	50	0:0:5	5
Total				11	10	18	290	170	460	340	800	27	27

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Go (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES											
1	PT410	Orthopedics Physiotherapy -II	Core	√	√	√			√	√	3,4,9
2	PT411	Sports Physiotherapy	Core	√	√	√			√	√	3,4,9
3	PT412	Community Based Rehabilitation in Physiotherapy	Core	√	√	√			√	√	3,4
4	PT418	Artificial Intelligence In Physiotherapy	Audit	√		√					3,4
PRACTICAL											
1	PT413	Orthopedics Physiotherapy - II Lab	Core	√	√	√			√	√	3,4,9
2	PT414	Sports Physiotherapy – Lab	Core	√	√	√			√	√	3,4,9
3	PT415	Project	Core	√	√	√			√	√	3,4,9, 17
4	PT416	Seminar on Clinical Issues	Core	√	√	√			√	√	3,4,9, 17
5	PT417	Clinical Training	Core	√	√	√			√	√	3,4,11

L: Lecture **T:** Tutorials **P:** Practical **CT:** Class Test **TA:** Teacher Assessment **ESE:** End Semester Examination,
AE= Ability Enhancement, **DSE-** Discipline Specific Elective, **Sessional Total:** Class Test + Teacher Assessment
Subject Total: Sessional Total + End Semester Examination (ESE)



Integral University, Lucknow

Effective from Session: 2018-19							
Course Code	PT410	Title of the Course	ORTHOPAEDICS PHYSIOTHERAPY-II	L	T	P	C
Year	IV	Semester	VIII	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil	The candidate will be able to identify, discuss, analyze, plan & prescribe the appropriate skills of executing short- & long-term physiotherapy treatment in the general Orthopedics condition and Musculoskeletal trauma.			
Course Objectives							

Course Outcomes	
CO1	Students will understand about basic concept of physiotherapy assessment and physiotherapy management of shoulder and Elbow disease and dysfunctions on the basis of functional diagnosis.
CO2	Students will understand about basic concept of physiotherapy assessment and physiotherapy management of wrist and hand disease and dysfunctions on the basis of functional diagnosis.
CO3	Students will understand about basic concept of physiotherapy assessment and physiotherapy management of knee, ankle and foot disease and dysfunctions on the basis of functional diagnosis.
CO4	Students will understand about basic concept of physiotherapy assessment and physiotherapy management of hip and spine disease and dysfunctions on the basis of functional diagnosis.
CO5	Students will understand about basic concept of physiotherapy assessment and physiotherapy management of rheumatological disorders and peripheral nerve injury of upper and lower limb on the basis of functional diagnosis.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	SHOULDER AND ELBOW	Frozen Shoulder and Rotator Cuff Disease, TOS, RSD and Student Elbow, Pulled Elbow, Tennis Elbow, Golfer Elbow, Pronator Teres Syndrome and Radial tunnel Syndrome	8	CO1
2	WRIST AND HAND	Carpal Tunnel Syndrome and Ulnar Tunnel Syndrome, Dupuytren's Contracture and Madlunge deformity, Dequervain's Disease and Ganglion, Trigger finger, Thumb and Mallet finger	8	CO2
3	KNEE, ANKLE AND FOOT	Knee Osteoarthritis and Chondromalacia of patella, Genu Varus, Genu Valgus, Genu recurvatum, CTEV, Flat Foot Pes Cavus, Plantar fasciitis, Metatarsalgia	8	CO3
4	HIP AND SPINE	Hip Osteoarthritis, Perthes's Disease, Coxa Vara / Valga, CDH, PIVD, Spondylitis, Lumbar canal stenosis, Spondylolisthesis.	8	CO4
5	RHEUMATOLOGY AND NERVE INJURY	Gout, Rheumatoid Arthritis, Ankylosing Spondylitis, Psoriatic Arthritis, Flat back, Lordosis, Swayback, Scoliosis, Kyphosis.	8	CO5

Reference Books:

1. Cash Text books of Orthopaedics and Rheumatology for physiotherapist Jaypee Publication
2. Tidy's Physiotherapy thirteenth edition by Stuart B.Porter.
3. Neuromusculoskeletal Examination and assessment fourth edition by Nicola J. Petty Churchill Livingstone
4. Therapeutic Exercise fifth edition by Carolyn Kisner F.A Davis Company Philadelphia

e-Learning Source:

1. <https://youtu.be/E3Eu0F73ROI>
2. <https://youtu.be/z-SeJh5-nOo>
3. <https://youtu.be/keBkeLUQFyo>
4. <https://youtu.be/4Ulwpe-TD6A>

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	3	3	-	-	1	-	2	1	3	3	3	2	3	1
CO2	2	3	3	2	3	-	-	-	-	3	1	3	2	3	2	2	1
CO3	2	3	3	2	3	-	-	-	-	3	-	2	3	3	3	3	-
CO4	1	3	3	3	3	-	1	1	-	2	1	3	3	3	2	3	-
CO5	1	3	3	3	3	-	1	1	-	3	2	3	3	3	3	2	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT410	ORTHOPAEDICS PHYSIOTHERAPY-II	Employ ability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4,9
		√	√	√			√	√	



Integral University, Lucknow

Effective from Session: 2018-19							
Course Code	PT411	Title of the Course	SPORT PHYSIOTHERAPY-II	L	T	P	C
Year	IV	Semester	VIII	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The student will be able to acquire concept of evaluation of sports and Sports injuries, and also will be able to provide Sports Training and Physiotherapy in particular to Sports injuries.						

Course Outcomes	
CO1	Prevention, Evaluation, and Management of Various Sports Injuries: Student will be able to understand prevention of different sports injuries using protective gear and Evaluation of Various Sports Injuries
CO2	Evaluation and Management of Various Sports Injuries: Student will be able to perform evaluation and mechanism of injuries and management of Various Sports Injuries of upper limb
CO3	Evaluation and Management of Various Sports Injuries: Student will be able to perform evaluation and mechanism of injuries in management of various sports Injuries of lower limb
CO4	Sports Nutrition, Doping & Medical Conditions in Athletes: Student will be acknowledged about basics Sports Nutrition and its importance in sports Doping & Medical Conditions in Athletes and importance of strength in sports and principles of resistance training in athlete
CO5	Introduction to Applied Sports Biomechanics: Student will be able to understand about Applied Sports Biomechanics and its role in injury prediction and prevention

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	PREVENTION, EVALUATION, AND MANAGEMENT OF VARIOUS SPORTS INJURIES	Pre-participation Evaluation, On field evaluation, Off field evaluation, Introduction to protective gear used for spine, upper limb, and lower limb, Introduction to Emergency care of a sports person	8	CO1
2	EVALUATION AND MANAGEMENT OF VARIOUS SPORTS INJURIES	Mechanism, prevention, and assessment and Physiotherapy management of injuries in: Shoulder: Impingement Syndrome, Rotator Cuff tear, Bicep Tendinitis, AC Joint sprain. Elbow: Lateral epicondylitis, medial epicondylitis, little league elbow, Wrist: Dequervance tenosynovitis, scaphoid fracture, Hand: Mallet finger, boxer fracture, boutenniere injuries, Spine: Whiplash injuries	8	CO2
3	EVALUATION AND MANAGEMENT OF VARIOUS SPORTS INJURIES	Mechanism, prevention, assessment and Physiotherapy management of injuries in-Hip & Groin: Piriformis syndrome, ITBFS, Adductor strain, Knee & leg: PFPS, ACL Injury, Hoffa's disease, Tennis leg, Shin Splint, Foot & Ankle: Ankle Sprain, Planter Fasciitis. Chest, abdomen	8	CO3
4	SPORTS NUTRITION, DOPING & MEDICAL CONDITIONS IN ATHLETES	Doping, Basic principles of Resistance Training, Sports Nutrition, Medical problems in athlete, Biomechanics of Running and its clinical implication	8	CO4
5	INTRODUCTION TO APPLIED SPORTS BIOMECHANICS	Biomechanics of Throwing and its clinical implication. Biomechanics of Running and its clinical implication, Biomechanics of Swimming and its clinical implication.	8	CO5

Reference Books:

1. Clinical Sports Medicine–By Karim Khan
2. Physical rehabilitation of a injured athlete – By Andrews & Harrelson
3. Therapeutic Exercise – By Micheal Huggins
4. Athletic & Sports Issues in Musculoskeletal Rehabilitation – By David J Magee

e-Learning Source:

1. <https://youtu.be/upxeWJs5Pio>
2. <https://youtu.be/UgSWHs49K4s>
3. <https://youtu.be/ECQ6fqR3x0c>
4. <https://youtu.be/HP5TSg9YJnE>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	2	3	-	1	1	1	2	1	2	2	3	2	2	2
CO2	2	1	3	3	3	-	2	-	1	3	1	3	3	2	3	3	1
CO3	1	2	3	2	2	-	1	1	-	2	-	2	3	3	2	2	2
CO4	2	2	3	3	3	-	2	-	-	3	-	3	3	2	2	2	1
CO5	1	2	3	3	3	-	1	-	1	3	1	3	3	2	2	3	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT411	SPORT PHYSIOTHERAPY-II	Empl oyability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√			√	√	3,4,9



Integral University, Lucknow

Effective from Session: 2023-24							
Course Code	PT412	Title of the Course	COMMUNITY BASED REHABILITATION IN PHYSIOTHERAPY	L	T	P	C
Year	IV	Semester	VIII	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The students will understand the concept of team approach in Rehabilitation, Observation and Identification of diagnostic features, Medical & surgical aspects of disabling conditions. Identification of residual potentials in patients with partial & total disability. Formulation of appropriate goals in treatment and rehabilitation.						

Course Outcomes	
CO1	Introduction to Rehabilitation: The student understands the concept of rehabilitation and delivery of health care with medical team work.
CO2	Introduction to Health Care System: The student able to learn disability evaluation within the physical therapy domain from impairment to disability.
CO3	Introduction to Industrial Therapy: The student will able to effectively communicate both orally and in writing the general principles of Industrial therapy, occupational hazards and manual handling concept to rule the musculoskeletal problem and their rehabilitation.
CO4	Introduction of Ergonomics: To understand the need of ergonomics and client evaluation in job assessment, placement with proper work conditioning and work hardening.
CO5	Introduction to Geriatric: To understand the geriatric rehabilitation under the theories of aging and physiological changes due to aging to make the lifestyle physically active.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	INTRODUCTION TO REHABILITATION	1. Introduction to Rehabilitation Medicine Delivery of Rehabilitation care 2. CBR 3. Planning Management & Evaluation of CBR Program 4. Community & Evaluation of client in community	8	CO1
2	INTRODUCTION TO HEALTH CARE SYSTEM	1. Health Planning Management & Health Care of Community 2. Resources and agencies involved in CBR 3. Disability Legislation Disability Evaluation 4. Role of International organization in Health Sector	8	CO2
3	INTRODUCTION TO INDUSTRIAL THERAPY	1. Industrial therapy–Primary rehabilitation team & other rehabilitation discipline 2. Occupational hazards 3. Tool Evaluation and Designs 4. Manual material handling 5. Material assistive device	8	CO3
4	INTRODUCTION OF ERGONOMICS	1. Ergonomics and job analysis 2. Job placement assessment and pre-employment screening 3. Work conditioning and work hardening 4. Office ergonomics–work station evaluation and design 5. Back injury prevention program 6. OSHA's Ergonomic program	8	CO4
5	ACUTE CARE AND FUNCTIONAL TREATMENT	1. Work conditioning and work hardening 2. Employee fitness program 3. Back injury prevention program 4. Educating the worker for maximum productivity	8	CO5

Reference Books:

1. Community Based Rehabilitation of Person with disabilities – By S.
2. Physiotherapy in Community Health & Rehabilitation – By Waqar Naqvi
3. Principles of Geriatric Physiotherapy – By N. K. Multani, S. K. Verma
4. Text Book of Rehabilitation – By S. Sunder

e-Learning Source:

1. <https://youtu.be/mVgiDhl-lwU>
2. <https://youtu.be/eujYbzaBKE0>
3. <https://youtu.be/OPqTjqeJnQ>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	-	3	3	2	2	2	2	2	1	1	2	2	1
CO2	3	-	2	-	-	3	2	1	1	3	1	3	2	2	1	3	2
CO3	3	-	2	1	1	2	3	2	1	2	2	2	1	3	2	2	1
CO4	3	1	1	1	1	3	2	1	2	2	1	3	2	3	2	3	1
CO5	3	1	2	2	1	2	3	2	2	3	1	3	2	3	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT412	COMMUNITY BASED REHABILITATION IN PHYSIOTHERAPY	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√			√	√	



Integral University, Lucknow

Effective from Session: 2023-2024							
Course Code	PT418	Title of the Course	ARTIFICIAL INTELLIGENCE IN PHYSIOTHERAPY	L	T	P	C
Year	IV	Semester	VIII	2	1	0	0
Pre-Requisite		Co-requisite					
Course Objectives	The curriculum aims to prepare physiotherapy graduate students with the knowledge and skills to leverage artificial intelligence in various aspects of their field, from movement analysis and rehabilitation to wearable technology and specialized physiotherapy domains.						

Course Outcomes				
CO1	To equip students with foundational knowledge and skills in the field of artificial intelligence.			
CO2	To focus on providing students with a solid foundation in machine learning concepts, techniques, and applications.			
CO3	To provide students with knowledge and skills at the intersection of artificial intelligence (AI), movement analysis, and rehabilitation.			
CO4	To focus on the integration of artificial intelligence (AI) techniques in the analysis and assessment of musculoskeletal conditions.			
CO5	To integrate artificial intelligence (AI) concepts and technologies into the specialized areas of sports physiotherapy, pediatric rehabilitation, and geriatric rehabilitation.			
Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction to artificial intelligence	History and evolution of AI, comparison of human and computer skill, Component of AI, Scope and significance in different domains, Ethical considerations in AI development and deployment, Intelligent Agent, logical agent. Problem solving through AI: Defining problem as a state space search, analyzing the problem, solving problem by searching, informed search and Uninformed Search	8	CO1
2	Machine Learning Basics	Neural networks and deep learning, Supervised and unsupervised learning, feature selection and engineering, learning from observation, knowledge in learning. Natural Language Processing: Brief history of NLP, Text processing, Sentiment analysis, language translation, Early NLP system, ELIZA system, LUNAR system, General NLP system.	8	CO2
3	AI in Movement Analysis and Rehabilitation	AI-driven movement analysis for personalized rehabilitation plans, Predictive modeling for gait analysis and motion assessment, Virtual reality and AI applications in motor learning, Wearable Technology and AI in Physiotherapy, Integration of AI with wearable devices for patient monitoring, Predictive modeling for activity recognition and compliance, Remote rehabilitation, and telehealth applications.	8	CO3
4	AI in Musculoskeletal Assessment	AI applications in musculoskeletal assessment and diagnosis, Predictive modeling for pain prediction and management, Machine learning for biomechanics and joint health analysis, Neurorehabilitation and Brain- Computer Interfaces, AI-driven approaches in neurorehabilitation, Predictive modeling for neurological disorder interventions, Brain-Computer Interface (BCI) applications in physiotherapy.	8	CO4
5	AI in Sports Physiotherapy, Pediatric and Geriatric Rehabilitation	AI applications in sports injury prevention and rehabilitation, Predictive modeling for performance optimization, Machine learning for athlete monitoring and recovery strategies, AI in Pediatric Physiotherapy, AI-driven interventions for pediatric rehabilitation, Predictive modeling for developmental milestones assessment, Technology-assisted approaches for pediatric physiotherapy, AI applications in geriatric rehabilitation and fall risk assessment, Predictive modeling for age-related mobility challenges, Machine learning for personalized care plans in geriatrics.	8	CO5

Reference Books:

1. Artificial Intelligence in Rehabilitation by Amitava Biswas and Joao Manuel R.S. Tavares
2. Neurorehabilitation Technology by David J. Reinkensmeyer and Volker Dietz
3. Artificial Intelligence in Medicine by Adam Bohr and Philip Leong
4. Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again by Eric Topol

e-Learning Source:

1. https://youtu.be/QRwzT82_y3c?si=LM9BHwPYVcuFb3ce
2. <https://youtu.be/JxgmHe2NyeY?si=uSQUXkHYn0zN3ZRl>
3. <https://youtu.be/isJWl02XpT4?si=T7rq9hXABzr3Tgi>
4. <https://www.youtube.com/live/Ax6y70Ys12k?si=SBVihSmuTbDgpxwN>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3	3	3	3	2	2	3	2	3	3	3	3	3
CO2	3	3	3	3	2	3	3	3	3	3	3	3	2	3	3	2	3
CO3	3	2	3	3	2	3	2	2	3	3	2	3	3	2	2	2	3
CO4	3	2	3	3	2	3	3	3	3	3	3	3	2	3	2	2	3
CO5	2	3	3	3	3	3	3	2	3	3	3	2	3	2	3	3	3

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation



Integral University, Lucknow

Effective from Session: 2018-19									
Course Code	PT413	Title of the Course	ORTHOPAEDICS PHYSIOTHERAPY-II LAB			L	T	P	C
Year	IV	Semester	VIII			0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil						
Course Objectives	This course involves a description of the assessment and management of patients with General Orthopedics condition and traumatology on the basis of functional diagnosis according to ICF model.								

Course Outcomes	
CO1	Students will understand about basic concept of subjective and objective examination in physiotherapy assessment and management in general Orthopaedics condition and Musculoskeletal trauma of Shoulder, Elbow, Wrist, Hand, Knee, Ankle, Foot, Hip, Spine, Rheumatology and Nerve Injury.
CO2	Students will understand about basic concept of investigations employed in physiotherapy assessment and physiotherapy management in various orthopedic Trauma.
CO3	Students will be able to rule out the specific outcome measures, setting of treatment goals and plan in various orthopedics condition and Musculoskeletal trauma of upper limb, lower limb, spine, rheumatological conditions and nerve injuries.
CO4	Students will understand the importance of documentation and maintenance of medical records regarding patients/client's condition.
CO5	Students will understand concept of physiotherapy management in post-traumatic and post- surgical cases of musculoskeletal trauma.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	SUBJECTIVE AND OBJECTIVE EXAMINATION	Patients' History: Medical and injury history, information about the disorder, its present state, its prognosis, and the appropriate treatment. Establish red flag signs and symptoms & Yellow flag signs and symptoms Observation: General posture, manner, attitude, willingness to cooperate, and any signs of overt pain behavior.	8	CO1
2	INVESTIGATION EMPLOYED IN ORTHOPEDIC TRAUMA	Vital signs, Scanning Examination, Examination of Specific Joints, Muscle Test Grading, Functional Assessment, Special (Diagnostic) Tests, Reflexes and Cutaneous Distribution, Joint Play Movements, Palpation, Diagnostic Imaging Normal Laboratory Values Used in Orthopedic Medicine.	8	CO2
3	OUTCOME MEASURES, SETTING OF TREATMENT GOALS AND PLAN	Contains complete physiotherapy assessment and management in various orthopedics condition	8	CO3
4	DOCUMENTATION (WRITING PATIENT/CLIENT NOTES)	Initial examination and evaluation, visit, reexamination, and conclusion of episode of care.	8	CO4
5	PHYSIOTHERAPY MANAGEMENT OF THE VARIOUS POST TRAUMATIC AND POST-SURGICAL CASES.	Physiotherapy treatment includes selecting appropriate modes of mobilization / manipulations, electro-therapy, therapeutic exercise & appropriate ergonomic advice for the relief of pain, restoration / maintenance of function & rehabilitation for maximum functional independence.	8	CO5

Reference Books:

1. Orthopedic physical assessment third and fifth Edition by David J Magee
2. Tidy's Physiotherapy thirteenth edition by Stuart Porter.
3. Neuromusculoskeletal Examination and assessment fourth edition by Nicola J. Petty Churchill Livingstone
4. Therapeutic Exercise fifth edition by Carolyn Kisner F.A Davis Company Philadelphia.

e-Learning Source:

1. <https://youtu.be/E3Eu0F73ROI>
2. <https://youtu.be/z-SeJh5-nOo>
3. <https://youtu.be/keBkeLUQFyo>
4. <https://youtu.be/4Ulwpg-TD6A>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	-	-	1	-	2	2	3	3	2	2	3	1
CO2	2	3	3	2	3	-	-	-	-	3	1	3	2	3	2	2	1
CO3	2	3	3	2	2	-	-	-	-	2	-	2	3	3	3	3	-
CO4	1	3	3	3	3	-	1	1	-	2	1	3	3	3	2	3	-
CO5	1	3	3	3	3	-	1	1	-	3	2	3	3	3	3	2	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT413	ORTHOPAEDICS PHYSIOTHERAPY-II LAB	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4,9
		√	√	√			√	√	



Integral University, Lucknow

Effective from Session: 2018-19								
Course Code	PT414	Title of the Course	SPORT PHYSIOTHERAPY-II LAB		L	T	P	C
Year	IV	Semester	VIII		0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil					
Course Objectives	To identify, discuss, analyze, plan & prescribe & acquire the skill of executing on field and off field Physiotherapy treatment in the regional sports condition.							

Course Outcomes	
CO1	Students will understand about hands- on techniques in various on field test like Illinois and Rockport test.
CO2	Students will understand about various plyometric technique associated with endurance and flexibility used in sports specific training protocols.
CO3	Students will understand about sports specific techniques to increase efficiency of athlete during event participation.
CO4	Students will understand about specificity of special tests in order to rule out various non pathological conditions.
CO5	Students will understand about the various first aid assembly in management during sports event efficiently and rehabilitate accordingly.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	AGILITY TEST	Demonstration and hands- on techniques in various on field test like Illinois and Rockport test.	8	CO1
2	PLYOMETRICS – UPPER LIMB AND LOWER LIMB	Demonstrate various plyometrics techniques associated with endurance and flexibility used in sports specific training protocols.	8	CO2
3	DIFFERENT TECHNIQUES USED IN COMMON SPORTS CONDITION	Demonstrate sports specific techniques to increase efficiency of athlete during event participation.	8	CO3
4	SPECIAL TEST IN SPORTS	To understand specificity of special tests in order to rule out various non pathological conditions.	8	CO4
5	DEMONSTRATION OF ON FIELD AND OFF FIELD MANAGEMENT	To understand about the various first aid assembly in management during sports event efficiently and rehabilitate accordingly.	8	CO5

Reference Books:

1. Clinical Sports Medicine – By Karim Khan
2. Physical rehabilitation of a injured athlete – By Andrews & Harrelson
3. Therapeutic Exercise – By Micheal Huggins
4. Athletic & Sports Issues in Musculoskeletal Rehabilitation – By David J Magee

e-Learning Source:

1. <https://youtu.be/upxeWJs5Pio>
2. <https://youtu.be/UgSWHs49K4s>
3. <https://youtu.be/ECQ6fqR3x0c>
4. <https://youtu.be/HP5TSg9YJnE>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	-	1	1	1	2	1	2	2	3	2	2	2
CO2	2	1	3	2	3	-	2	-	1	3	1	3	3	2	3	3	1
CO3	1	2	3	3	2	-	1	1	-	2	-	2	3	3	3	2	2
CO4	2	2	3	3	3	-	1	-	-	3	-	3	3	2	2	2	1
CO5	1	2	3	3	3	-	1	-	1	3	1	3	3	2	2	3	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT414	SPORT PHYSIOTHERAPY-II LAB	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4,9
		√	√	√			√	√	



Integral University, Lucknow

Effective from Session: 2021-22							
Course Code	PT415	Title of the Course	PROJECT	L	T	P	C
Year	IV	Semester	VIII	0	4	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The main objective of this course is to develop independence in the research skills and to develop the research interpretation skill. To promote education and research in physiotherapy and provide academic and professional excellence for immediate productivity in hospital, governmental, or clinical settings for an ultimate benefit of society and environment.						

Course Outcomes	
CO1	The students will be able to perform literature review, identify state of the art in that field.
CO2	The students will be able to define the problem and develop synopsis of a defined research problem
CO3	The students will be able to establish a methodology using advanced tools / techniques for solving the problem including project management and finances.
CO4	The students will be able to prepare the research report and its oral demonstrations.
CO5	The students will be gain practical experience in project management in biotechnological industry, be able to use various techniques in contemporary research for project, perform numerical analysis and interpret the results

PROJECT ASSESSMENT FORM

Name of Student:		Session:	
Enrolment Number:		Date:	
Name of Subject:	PROJECT	Subject code:	PT415
Topics:			

S. No.	Evaluation	Point to be Considered	Max. Marks	Marks Obtained
1.	On the basics of continuous assessment (10 Marks)	Periodic Consultation with Guide	2	
2.		Regular collection of Data with the consultation of guide.	2	
3.		Command of the topic & presentation skill	2	
4.		Methods, analysis, dissuasion and Conclusions	2	
5.		Contribution to knowledge and thesis structure	2	
		Review all heading		
1.	On the basics of External Evaluators at the time of End Sem Examination.	Introduction	3	
2.		Aims, objectives & research hypothesis	3	
3.		Review of literature	3	
4.		Material & Methods	3	
5.		Data analysis & results	3	
6.		Discussion, lamination & future study	3	
7.		Conclusion, signification.	3	
8.		Bibliography	3	
9.		Tables, graph, diagram & Annexure (if any) Statistical Analysis Master Chart	3	
10.		The deface of study	3	
		Total Score	40	

Comments/Suggestions:

(Name and signature of Incharge)

(Head, Physiotherapy)

EVALUATION OF BPT PROJECT

Evaluation of Project of BPT- Students has to prepare oral presentation during the final viva; each student will be assessed in a 20 minutes time (15 min for presentation & 5 min for discussion). The evaluation of dissertation by external examiner with proper approval of concern authorities. The end semester examination will be 40 marks as external evaluations and 60 marks will be by the internal evaluation (Continuous Assessment=40+15+5):

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
CO2	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
CO3	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
CO4	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
CO5	3	3	3	3	2	2	3	2	1	3	-	-	3	2	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs									
Course Code	Course Title	Attributes							SDGs No.
PT415	PROJECT	Empla yability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3.4,9, 17
		√	√	√			√	√	



Integral University, Lucknow

Effective from Session: 2021-22							
Course Code	PT416	Title of the Course	SEMINAR ON CLINICAL ISSUES	L	T	P	C
Year	IV	Semester	VIII	0	2	0	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	This course will serve as a platform for students to integrate various components of patient management and debate contentious issues in the efficacy of Physiotherapy techniques used in musculoskeletal, neurological, cardiopulmonary, & Sports rehabilitation as well as enhance presentation skills.						

Course Outcomes	
CO1	The students will understand and interpret latest advancements through different technical papers, reports, Journals, Data sheets, books etc
CO2	The students will inculcate the skills for literature survey and will learn to manage resources effectively.
CO3	The students will be able to summarize the recent research and technologies in the form of review and will be able to deliver power point presentations on an assigned topic.
CO4	The students will be able to communicate his/her ideas with his peers as audience, which will enhance both oral and written communicationskills.
CO5	The students will be able to create interest to pursue lifelong learning.

SEMINAR PRESENTATION ASSESSMENTN FORM

Name of Student:		Session:	
Enrolment Number:		Date:	
Name of Subject:	Seminar on Clinical Issues	Subject code:	PT416
Topics:			

Criteria	Sub-Criteria	Max. Marks	Marks Obtained
Introduction (Max marks-05)	Use appropriate background information	02	
	Has clear statement of purpose	02	
	Shows a logical sequence	01	
Factual Content (Max marks- 10)	Includes accurate information	02	
	Shows up-to-date content	02	
	Presents relevant content	02	
	Shows in-depth and sufficient details	01	
	Addresses all important issues	01	
	Is selective	01	
	Use of proper English Grammar in the text	01	
Presentation Quality (Max marks-03)	Has a good design of presentation (appropriate font, type, size, color, matter per slide etc.)	02	
	Has a clear verbal expression and eye contact with audience	01	
Response to questions (Max marks-05)	Answers question(s) correctly	02	
	Has the ability to think on the spot	02	
	Shows an ability to defend content of presentation	01	
Time Management (Max. mark-02)	Completes the presentation within allocated time	02	
Total Marks		25	

Note: In case of Oral Presentation, each student will be assessed in a 20 minutes time (15 min for presentation & 5 min for discussion) out of 50 marks.

Comments/Suggestions:

(Name and signature of Incharge)

(Head, Physiotherapy)

EVALUATION OF SEMINAR ON CLINICAL ISSUES

BPT- Students has to prepare minimum 2 long case and 2 short cases during their seminar presentation during due course of time. The evaluation for internal clinical examination of 50 marks will be distributed:

Seminar Presentation=**25marks**.

Viva voce=**20 marks**

Attendance=**5 marks**

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
CO2	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
CO3	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
CO4	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
CO5	3	3	3	3	2	2	3	2	1	3	-	-	3	2	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT416	SEMINAR ON CLINICAL ISSUES	Emlo yability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√			√	√	3,4,9, 17



Integral University, Lucknow

Effective from Session: 2021-22							
Course Code	PT417	Title of the Course	CLINICAL POSTING	L	T	P	C
Year	IV	Semester	VIII	0	0	10	5
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	Students will engage in clinical practice in Physiotherapy departments in the musculoskeletal, neurology, cardiopulmonary, sports settings to enhance their clinical skills and apply contemporary knowledge gained during teaching sessions.						

Course Outcomes	
CO1	To learn the punctuality and interaction with colleague and supporting staff during clinical training.
CO2	To develop assessment skills.
CO3	To develop appropriate treatment protocol.
CO4	To understand the importance of documentation of the case record and case presentation.
CO5	To develop discipline and improve overall quality of clinical work.

CLINICAL POSTING ASSESSMENT FORM

Name of Student:		Session:	
Enrolment Number:		Date:	
Name of Subject:	Clinical Posting	Subject code:	PT417
Topics:			

S. No.	Point to be Considered	Max. Marks	Marks Obtained
1.	Punctuality	4	
2.	Interaction with colleagues and supporting staff	2	
3.	Maintenance of case records	3	
4.	Presentation of case during rounds	2	
5.	Investigation work up	2	
6.	Bedside Manners	2	
7.	Rapport with patients	2	
8.	Treatment approach & technique	3	
9.	Discipline	2	
10.	Overall quality of clinical work	3	
TOTAL SCORE		25	

(Name and signature of Incharge)

(Head, Physiotherapy)

GUIDELINES FOR CLINICAL TRAINING PROGRAM

The students of Graduate Physiotherapy program must spend above mentioned allotted time period in the hospital based clinical training for specified clinical experiences to meet the objectives of the training program. This period of practical and theoretical experience will enable the students to acquire competency and experience to perform as an independent practice and will enable to adjust to the real practical life in different units in the hospital settings.

S.No.	Program Name	Year/Semester	Duration of Training
5.	BPT	IIIrd Year/ Vth Semester	4 Months
6.		IIIrd Year/ VI th Semester	4 Months
7.		IVth Year/ VII th Semester	4 Months
8.		IVth Year/ VIII th Semester	4 Months

By the successful completion of this clinical training period, the student is expected to fulfil the objectives of the program and will be examination as given below:

S.No.	Program Name	Year/Semester	Case file	Practical on Case	Voice/Viva	Attendance
5.	BPT	IIIrd Year/ Vth Semester	10 Marks	10 Marks (1 Long Case and 2 Short Case)	25 Marks	5 Marks
6.		IIIrd Year/ VI th Semester				
7.		IVth Year/ VII th Semester				
8.		IVth Year/ VIII th Semester				

EVALUATION OF CLINICAL POSTING

BPT- Students has to prepare 1 long case and 2 short cases during their clinical posting. The evaluation for internal clinical examination of 50 marks will be distributed:

Cases during clinical posting=**20 marks**.

Viva voce =**25 marks**

Attendance=**5 marks**

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
CO2	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
CO3	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
CO4	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
CO5	3	3	3	3	2	2	3	2	1	3	-	-	3	2	3	3	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT417	CLINICAL POSTING	Employ ability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4,11
		✓	✓	✓			✓	✓	