



**INTEGRAL UNIVERSITY, LUCKNOW**

**INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES**

**DEPARTMENT OF PHYSIOTHERAPY**

**MASTER OF PHYSIOTHERAPY**

**(MPT)**

**NEUROLOGY**

**SYLLABUS**

**YEAR/ SEMESTER: II/III**



## Integral University, Lucknow

**Effective from Session: 2016-17**

Course Code	PT601	Title of the Course	MANAGEMENT, EDUCATION & PROFESSIONAL ETHICS	L	T	P	C
Year	II	Semester	III	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	<p>This course deals with basic issues of management to assist the practitioner in efficiently addressing issues related to the organization and administration of a Physiotherapy Department.</p> <p>The education module of this course will provide students information on improving their teaching skills in the classroom and clinical setting. Educational theory is presented. Students develop and present educational units to audiences that may include Bachelor of Physiotherapy students or peers. It provides the student with an introduction to ethical issues facing physiotherapists. Specific topics include documentation. A variety of current issues affecting the physiotherapy profession are addressed in this course. The science of management is presented as it relates to the essential functions of the business of physiotherapy. Following are the topics to be included but not limited to:</p>						

### Course Outcomes

CO1	The students will understand about basic marketing management.
CO2	The students will understand about hospital administration in various health care setups.
CO3	The students will understand about the Philosophy of Education, curriculum and basic concept of teaching & learning.
CO4	The students will understand about the basics of pedagogy.
CO5	The students will understand about the Rules of Professional Conduct and responsibilities.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	MANAGEMENT	<ol style="list-style-type: none"> <li>1. Management - Functions of Management, Evolution of Management Through Scientific Management Theory, Classical Theory - Systems Approach - Contingency Approach.</li> <li>2. Management Process - Planning, Organization, Direction, Controlling Decision Making</li> <li>3. Introduction to Personal Management - Staffing Recruitment Selection, Performance Appraisal, Collective Bargaining, Discipline, Job Satisfaction</li> <li>4. Quantitative Methods of Management - Relevance of Statistical and / or Techniques in Management.</li> <li>5. Marketing - Market Segmentation, Marketing Research Production Planning Pricing, Channels of Distribution, Promotion, Consumer Behavior, and Licensor</li> <li>6. Total Quality Management- Basis of Quality Management - Acid for Quality Control Quality Assurance Program in Hospitals, Medical Audit, and International Quality Systems.</li> </ol>	8	CO1
2	ADMINISTRATION	Hospital as an Organization - Functions and types of Hospitals selected clinical supportive and ancillary services of a Hospital, Emergency Department, Nursing, Physical Medicine & Rehabilitation, Clinical Laboratory, Pharmacy and Dietary Department. Roles of Physiotherapist, Physiotherapy Director, Physiotherapy Supervisor, Physiotherapy Assistant, Physiotherapy Aide, Occupational Therapist, Home Health Aide, Volunteer. Direct care and Referral Relationships and Confidentiality.	8	CO2
3	EDUCATION	<ol style="list-style-type: none"> <li>1. Philosophy of Education and Emerging issues in Education.</li> <li>2. Formal, Informal and Non-Formal Education, Agencies of Education, Current issues and trends in Higher Education (Issue of Quality in Higher Education, Autonomy and Accountability, Privatizations, Professional Development of Teachers, Education of Persons with Disabilities), Need for Educational Philosophy (Some Major Philosophies, Idealism Naturalism, Pragmatism and their Implications for Education).</li> <li>3. Concept of Teaching and Learning: Meaning and Scope of Educational Psychology, meaning and relationship between teaching and learning.</li> <li>4. Curriculum: Meaning and Concept, Basis of Curriculum Formulation Development, Framing Objectives for Curriculum, Process of Curriculum Development and Factors Affecting Curriculum Development, Evaluation of Curriculum.</li> </ol>	8	CO3
4	GUIDANCE AND COUNSELING PLANNING FOR TEACHING CLINICAL EDUCATION	<ol style="list-style-type: none"> <li>1. Guidance and Counseling: Meaning and Concepts of Guidance and Counseling, Principles, Guidance and Counseling Services for Students and Faculty Members, Faculty Development and Development of Personnel for P.T. Services.</li> <li>2. Method and Techniques of Teaching: Lecture, Demonstration, Discussion, Seminar, Assignment, Project and Case Study.</li> <li>3. Planning for Teaching: Bloom's Taxonomy of Instructional Objectives, Writing Instructional Objectives in Behavioral Terms. Unit Planning and Lesson Planning.</li> <li>4. Teaching Aides: Types of Teaching Aides, Principles of Selection, Preparation, and Use of Audio-Visual Aides.</li> <li>5. Clinical Education: Awareness and Guidance to the Common People about Health and Diseases and Available Professional Services, Patient Education, Education of the Practitioners.</li> </ol>	8	CO4
5	LEGAL PROFESSIONAL ETHICAL ISSUES	<ol style="list-style-type: none"> <li>1. The Implications &amp; Conformation to the Rules of Professional Conduct.</li> <li>2. Code of Ethics.</li> <li>3. Legal Responsibility for Their Actions in the Professional Context and Understanding the Physiotherapist's Liability And Obligations In The Case of Medical Legal Action.</li> <li>4. A Wider Knowledge of Ethics Relating to Current Social and Medical Policy in the Provisions of Health Care.</li> <li>5. The Role of the International Health Agencies Such as the World Health Organizations.</li> <li>6. Standards of Practice for Physiotherapists, Current Issues.</li> </ol>	8	CO5

<b>Reference Books:</b>																	
1. Basic Management. Trivedi																	
2. Market Segmentation Theory. P Cotler																	
3. Hospital Administration. Sundaran																	
4. Byelaws of the Delhi Council for Physiotherapy and Occupational Therapy																	
5. Principles of Education – Soti Shivendra Chandra and Rajendra K. Sharma																	
6. Philosophical Foundation of Education – Srinibas Bhattacharya																	
7. Sociological Foundation of Education – Srinibas Bhattacharya																	
8. Psychological Foundation of Education – Srinibas Bhattacharya																	
<b>e-Learning Source:</b>																	
1. <a href="https://youtu.be/scZVLCB1aX0">https://youtu.be/scZVLCB1aX0</a>																	
2. <a href="https://youtu.be/FpQEwbAV3Qw">https://youtu.be/FpQEwbAV3Qw</a>																	
3. <a href="https://youtu.be/D6gRTHzE2XQ">https://youtu.be/D6gRTHzE2XQ</a>																	

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

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

**Attributes & SDGs Common for all branches / Disciplines**

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>							<b>SDGs No.</b>
<b>PT601</b>	<b>MANAGEMENT, EDUCATION &amp; PROFESSIONAL ETHICS</b>	<b>Employability</b>	<b>Entrepreneurship</b>	<b>Skill Development</b>	<b>Gender Equality</b>	<b>Environment &amp; Sustainability</b>	<b>Human Value</b>	<b>Professional Ethics</b>	<b>3,4,17</b>
		√	√	√			√	√	



## Integral University, Lucknow

Effective from Session: 2016-17							
Course Code	PT602	Title of the Course	BIOMECHANICS AND KINESIOLOGY-II	L	T	P	C
Year	II	Semester	III	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	Students will be able to identify and apply principles of biomechanics while setting up individualized treatment protocols.						

<b>Course Outcomes</b>	
<b>CO1</b>	Students must know about the kinematics and kinetics of upper limb and its Pathomechanics.
<b>CO2</b>	Students will understand about the kinematics and kinetics of lower limb and its Pathomechanics.
<b>CO3</b>	Students will understand about the kinematics and kinetics of axial skeletal and its Pathomechanics.
<b>CO4</b>	Students will able to learn about gait and posture during human body assessment leading to various musculoskeletal disorders.
<b>CO5</b>	Students will understand about the Prescriptions Checkouts & Proper Fittings of orthosis and prosthesis.

<b>Unit No.</b>	<b>Title of the Unit</b>	<b>Content of Unit</b>	<b>Contact Hrs.</b>	<b>Mapped CO</b>
1	KINESIOLOGY OF UPPER LIMB	Arthrology and Arthrokinematics, Kinetics, Pathokinesiology 1. Shoulder 2. Elbow 3. Wrist and Hand	8	CO1
2	KINESIOLOGY OF LOWER LIMB	Arthrology and Arthrokinematic, Kinetics, Pathokinesiology 1. Hip 2. Knee. 3. Ankle and Foot	8	CO2
3	KINESIOLOGY OF SPINE	Arthrology and Arthrokinematic, Kinetics, Pathokinesiology 1. Cervical 2. Thoracic 3. Lumbar-sacral.	8	CO3
4	GAIT AND POSTURE	1. Gait Parameter- Kinetic, Kinematic, Time – Space, Pathological Gait –Running, Stair Climbing, Changes in Gait Following Various Surgeries /Diseases / Disorders. 2. Posture- Standing, Sitting, Pathokinesiology	8	CO4
5	BIOMECHANICS OF ORTHOSIS & PROSTHESIS	1. Orthosis of Upper Limb, 2. Orthosis of Lower Limb, 3. Orthosis of Spine, 4. Bioengineering of Prosthesis, Prescriptions Checkouts & Proper Fittings, Biomechanical Principles governing them of Prosthetics, Aids used in Management of Disability.	8	CO5

<b>Reference Books:</b>	
1.	Biomechanics & Clinical Kinesiology-Cynthia Norkin
2.	Basic Biomechanics. Nordin.
3.	Basic Biomechanics & clinical Kinesiology. Otis
4.	Biomechanics of Human Movement. D Winter
5.	Kinesiology: Application to Pathological Motion. GL Soderberg
<b>e-Learning Source:</b>	
1.	<a href="https://www.youtube.com/watch?v=r7_TMkY9I2g">https://www.youtube.com/watch?v=r7_TMkY9I2g</a>
2.	<a href="https://www.youtube.com/watch?v=y2JZEzTG_BI">https://www.youtube.com/watch?v=y2JZEzTG_BI</a>
3.	<a href="https://www.youtube.com/watch?v=6-nSvntEANY">https://www.youtube.com/watch?v=6-nSvntEANY</a>
4.	<a href="https://www.youtube.com/watch?v=cvZaIVARWpk">https://www.youtube.com/watch?v=cvZaIVARWpk</a>
5.	<a href="https://www.youtube.com/watch?v=0vvp9cCVNI">https://www.youtube.com/watch?v=0vvp9cCVNI</a>

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

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

Attributes & SDGs Common for all branches / Disciplines									
Course Code	Course Title	Attributes							SDGs No.
PT602	BIOMECHANICS AND KINESIOLOGY-II	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√			√	√	
									3,4,9



## Integral University, Lucknow

**Effective from Session: 2016-17**

Course Code	PT603N	Title of the Course	PHYSIOTHERAPY –II (NEUROLOGICAL SPECIFIC PHYSICAL THERAPY AND REHABILITATION)	L	T	P	C
Year	II	Semester	III	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	After a review of the latest theories of motor control, motor learning, and recovery of function, students are provided with a conceptual framework for clinical practice and a practical framework for understanding and examining impairments in patients with neurological deficits. Armed with a solid foundation, students then build a thorough understanding of motor control issues as they relate to posture and balance, mobility, and upper extremity function. For each of these three key areas, the authors discuss normal control processes, age-related issues, abnormal function, and the clinical applications of current research.						

Course Outcomes	
CO1	Understanding of basic concept regarding various neurological assessments in clinical practice in various setups. Understanding of movement disorders like Parkinson, ataxia and Huntington's disease. Understanding of motor learning related to balance.
CO2	Understanding of basic theoretical concept behind the management of ALS, MS and Hemiplegia. Understanding of basic concept of gait rehabilitation. Understanding about theoretical & therapeutic concept of various neuro-therapeutic techniques
CO3	Understanding of normal developmental milestone. Understanding of musculoskeletal Development and Adaptation. Understanding of developmental Coordination Disorder. Understanding of differential diagnosis and interventional strategies for pediatric conditions.
CO4	Understanding of health and wellness issues in Geriatrics. Understanding of ageing with dignity and chronic impairments. Understanding of balance and Coordination training in Geriatrics. Understanding of cognitive & perceptual dysfunctions and their impact on Geriatrics rehabilitation.
CO5	Understanding about theoretical & therapeutic concept of various neuro-therapeutic techniques

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	MANAGEMENT OF MOVEMENT DISABILITIES	1. Parkinson's disease. 2. Huntington's chorea, Wilson's disease. 3. Movement Dysfunction Associated with Cerebellar Problems. 4. Balance and Vestibular Dysfunction. 5. Motor Learning Concepts In Balance Retraining Techniques.	8	CO1
2	MANAGEMENT OF CLINICAL PROBLEMS	1. Multiple Sclerosis. 2. Amyotrophic Lateral Sclerosis. 3. Demyelinating Inflammatory Poly-radiculoneuropathy. 4. Hemiplegia. 5. .Gait Rehabilitation	8	CO2
3	UNDERSTANDING MOTOR PERFORMANCE IN CHILDREN	1. The Child's Development of Functional Movement 2. .Musculoskeletal Development and Adaptation 3. Developmental Coordination Disorder. 4. Physical Fitness during Childhood. 5. Clinical Decision making in pediatric physical therapy 6.Cerebral Palsy & Myelodysplasia	8	CO3
4	UNDERSTANDING MOTOR PERFORMANCE IN GERIATRICS	1. Health and wellness issues in Geriatrics. 2. Ageing with dignity and chronic impairments. 3. .Intervention for depression and fear of fall. 4. Balance and Coordination training in Geriatrics. 5. Cognitive & perceptual dysfunctions and their impact on Geriatrics rehabilitation.	8	CO4
5	FUNDAMENTALS OF THERAPEUTIC APPROACHES	1. Proprioceptive Neuromuscular Facilitation (PNF). 2. Neurodevelopment therapy (NDT). 3. Sensory integration Technique (SIT). 4. Motor Relearning Program (MRP). 5. Constraint Induced Movement Therapy (CIMT) 6. .Roods approach 7. Vojta Therapy 8. Mental imagery technique	8	CO5

### Reference Books:

- Physical Therapy For Children By Suzann K. Campbell
- Neurological rehabilitation by Darcy a. Umphred
- Motor Control. Theory and Practical Applications. AS Cook, M Woollacott
- A Motor Relearning Programme for Stroke. J Carr. R Shepherd
- Motor Control and Learning. A Behavioral Emphasis. R A Schmidt

### e-Learning Source:

- <https://www.youtube.com/watch?v=gZhcF9gjTA>
- <https://www.youtube.com/watch?v=z-cARP6He4c>
- <https://www.youtube.com/watch?v=2S-D7GdBLyw>
- <https://www.youtube.com/watch?v=F8uLqba82IY>
- <https://www.youtube.com/watch?v=V31kMrSk5U>

	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	3	2	3	2	2	1	-	1	1	3	3	1	2	1
CO2	1	3	3	3	2	3	2	2	1	-	1	1	3	3	1	2	1
CO3	3	3	2	2	2	2	1	1	1	-	1	1	3	3	2	2	2
CO4	3	3	2	2	2	2	1	1	1	-	1	1	3	3	2	2	2
CO5	1	3	3	3	3	2	3	3	2	-	-	-	2	3	2	2	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation  
 Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT603N	PHYSIOTHERAPY –II (N)	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	3,4



## Integral University, Lucknow

Effective from Session: 2016-17							
Course Code	PT604	Title of the Course	BIOMECHANICS AND KINESIOLOGY-II LAB	L	T	P	C
Year	II	Semester	III	0	0	2	1
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	Students will be able to identify and apply principles of biomechanics while setting up individualized treatment protocols.						

<b>Course Outcomes</b>	
<b>CO1</b>	Students must know about the practical aspect of kinematics and kinetics of upper limb and its Pathomechanics.
<b>CO2</b>	Students will understand about practical aspect of the kinematics and kinetics of lower limb and its Pathomechanics.
<b>CO3</b>	Students will understand about the practical aspect of kinematics and kinetics of axial skeletal and it's Pathomechanics.
<b>CO4</b>	Students will able to learn about practical aspect of gait and posture during human body assessment leading to various disorders.
<b>CO5</b>	Students will understand about the practical aspect of Prescriptions Checkouts & Proper Fittings of orthosis and prosthesis.

<b>Unit No.</b>	<b>Title of the Unit</b>	<b>Content of Unit</b>	<b>Contact Hrs.</b>	<b>Mapped CO</b>
1	KINESIOLOGY OF UPPER LIMB	Practical demonstration of Arthrokinematic of following joints: 1. Shoulder 2. Elbow 3. Wrist and Hand	8	CO1
2	KINESIOLOGY OF LOWER LIMB	Practical demonstration of Arthrokinematic of following joints: 1. Hip 2. Knee. 3. Ankle and Foot	8	CO2
3	KINESIOLOGY OF SPINE	Practical demonstration of Arthrokinematic of following regions: 1. Cervical 2. Thoracic 2. Lumbar-sacral.	8	CO3
4	GAIT AND POSTURE	Practical demonstration of following: 1. Gait Parameter- Kinetic, Kinematic, Time – Space, Pathological Gait –Running, Stair Climbing, Changes in Gait Following Various Surgeries /Diseases / Disorders. 2. Posture- Standing, Sitting, Pathokinesiology	8	CO4
5	BIOMECHANICS OF ORTHOSIS & PROSTHESIS	Practical demonstration of following: 1. Orthosis of Upper Limb, 2. Orthosis of Lower Limb, 3. Orthosis of Spine, 4. Bioengineering of Prosthesis, Prescriptions Checkouts & Proper Fittings, Biomechanical Principles governing them of Prosthetics, Aids used in Management of Disability.	8	CO5

<b>Reference Books:</b>	
1. Biomechanics & Clinical Kinesiology-Cynthia Norkin	
2. Basic Biomechanics. Nordin.	
3. Basic Biomechanics & clinical Kinesiology. Otis	
4. Biomechanics of Human Movement. D Winter	
5. Kinesiology: Application to Pathological Motion. GL Soderberg	
<b>e-Learning Source:</b>	
6. <a href="https://www.youtube.com/watch?v=r7_TMkY9I2g">https://www.youtube.com/watch?v=r7_TMkY9I2g</a>	
7. <a href="https://www.youtube.com/watch?v=y2JZEzTG_BI">https://www.youtube.com/watch?v=y2JZEzTG_BI</a>	
8. <a href="https://www.youtube.com/watch?v=6-nSvntEANY">https://www.youtube.com/watch?v=6-nSvntEANY</a>	
9. <a href="https://www.youtube.com/watch?v=cvZaIVARWpk">https://www.youtube.com/watch?v=cvZaIVARWpk</a>	
10. <a href="https://www.youtube.com/watch?v=0vvp9cCVNI">https://www.youtube.com/watch?v=0vvp9cCVNI</a>	

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

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

**Attributes & SDGs Common for all branches / Disciplines**

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>							<b>SDGs No.</b>
PT604	BIOMECHANICS AND KINESIOLOGY-II LAB	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√	√		√	√	





## Integral University, Lucknow

Effective from Session: 2016-17							
Course Code	PT605N	Title of the Course	PHYSIOTHERAPY –II LAB (NEUROLOGICAL SPECIFIC PHYSICAL THERAPY AND REHABILITATION)	L	T	P	C
Year	II	Semester	III	0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	Students will be instructed via demonstrations, hands-on techniques, field visits and case conferences on specific techniques used in management of patients with neurological disorders. Students will draw on their experiences at the clinical postings to formulate a treatment plan for cases presented at the case conference.						

Course Outcomes	
CO1	Understanding of basic practical aspect concept regarding various neurological assessments in clinical practice in various setups. Understanding of practical aspect of movement disorders like Parkinson, ataxia and Huntington's disease. Understanding of motor learning related to balance.
CO2	Understanding of basic practical aspect of the concept behind the management of ALS, MS and Hemiplegia. Understanding of basic practical aspect concept of gait rehabilitation. Understanding about theoretical & therapeutic concept of various neuro-therapeutic techniques
CO3	Understanding of practical aspect of normal developmental milestone. Understanding of musculoskeletal Development and Adaptation. Understanding of developmental Coordination Disorder. Understanding of differential diagnosis and interventional strategies for pediatric conditions.
CO4	Understanding of practical aspect of the health and wellness issues in Geriatrics. Understanding of ageing with dignity and chronic impairments. Understanding of balance and Coordination training in Geriatrics. Understanding of cognitive & perceptual dysfunctions and their impact on Geriatrics rehabilitation.
CO5	Understanding about practical aspect & therapeutic concept of various neuro-therapeutic techniques

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	MANAGEMENT OF MOVEMENT DISABILITIES	In the practical aspect students must know about the Parkinson's disease. Huntington's Chorea, Wilson's disease. Movement Dysfunction Associated with Cerebellar Problems. Balance and Vestibular Dysfunction. Motor Learning Concepts In Balance Retraining Techniques.	8	CO1
2	MANAGEMENT OF CLINICAL PROBLEMS	In the practical aspect students must know about the Multiple Sclerosis. Amyotrophic Lateral Sclerosis. Demyelinating Inflammatory Poly radiculo neuropathy, Hemiplegic, Gait Rehabilitation	8	CO2
3	UNDERSTANDING MOTOR PERFORMANCE IN CHILDREN	In the practical aspect students must know about the The Child's Development of Functional Movement, .Musculoskeletal Development and Adaptation Developmental Coordination Disorder. Physical Fitness during Childhood. Clinical Decision making in pediatric physical therapy, Cerebral Palsy & Myelodysplasia	8	CO3
4	UNDERSTANDING MOTOR PERFORMANCE IN GERIATRICS	In the practical aspect students must know about the Health and wellness issues in Geriatrics, Ageing with dignity and chronic impairments, Intervention for depression and fear of fall. Balance and Coordination training in Geriatrics. Cognitive & perceptual dysfunctions and their impact on Geriatrics rehabilitation.	8	CO4
5	FUNDAMENTALS OF THERAPEUTIC APPROACHES	In the practical aspect students must know about the Proprioceptive Neuromuscular Facilitation (PNF), Neurodevelopment therapy (NDT). Sensory integration Technique (SIT). Motor Relearning Program (MRP). Constraint Induced Movement Therapy (CIMT) .Roods approach, Vojta Therapy, Mental imagery technique.	8	CO5

### Reference Books:

1. Physical Therapy For Children By Suzann K. Campbell
2. Neurological rehabilitation by Darcy a. Umphred
3. Motor Control. Theory and Practical Applications. AS Cook, M Woollacott
4. A Motor Relearning Programme for Stroke. J Carr. R Shepherd
5. Motor Control and Learning. A Behavioral Emphasis. R A Schmidt

### e-Learning Source:

1. <https://www.youtube.com/watch?v=gzZhcf9gjTA>
2. <https://www.youtube.com/watch?v=z-cARP6He4c>
3. <https://www.youtube.com/watch?v=2S-D7GdBLyw>
4. <https://www.youtube.com/watch?v=F8uLqba82IY>

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

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

Attributes & SDGs									
Course Code	Course Title	Attributes							SDGs No.
PT605N	PHYSIOTHERAPY –II LAB (N)	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	3,4





## Integral University, Lucknow

<b>Effective from Session: 2016-17</b>							
<b>Course Code</b>	<b>PT606</b>	<b>Title of the Course</b>	<b>SEMINAR ON CLINICAL ISSUES</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>II</b>	<b>Semester</b>	<b>III</b>	0	3	0	3
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>				
<b>Course Objectives</b>	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.						

<b>Course Outcomes</b>	
<b>CO1</b>	The students will understand and interpret latest advancements through different technical papers, reports, Journals, Data sheets, books etc
<b>CO2</b>	The students will inculcate the skills for literature survey and will learn to manage resources effectively.
<b>CO3</b>	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.
<b>CO4</b>	The students will be able to communicate his/her ideas with his peers as audience, which will enhance both oral and written communications skills.
<b>CO5</b>	The students will be able to create interest to pursue lifelong learning.

### SEMINAR PRESENTATION ASSESSMENT FORM

<b>Name of Student:</b>		<b>Session:</b>	
<b>Enrollment Number:</b>		<b>Date:</b>	
<b>Name of Subject:</b>	Seminar on Clinical Issues	<b>Subject code:</b>	PT606
<b>Topics:</b>			

<b>Criteria</b>	<b>Sub-Criteria</b>	<b>Max. Marks</b>	<b>Marks Obtained</b>
Introduction (Max marks-09)	Use appropriate background information	<b>03</b>	
	Has clear statement of purpose	<b>03</b>	
	Shows a logical sequence	<b>03</b>	
Factual Content (Max marks- 21)	Includes accurate information	<b>03</b>	
	Shows up-to-date content	<b>03</b>	
	Presents relevant content	<b>03</b>	
	Shows in-depth and sufficient details	<b>03</b>	
	Addresses all important issues	<b>03</b>	
	Is selective	<b>03</b>	
	Use of proper English Grammar in the text	<b>03</b>	
Presentation Quality (Max marks-06)	Has a good design of presentation (appropriate font, type, size, color, matter per slide etc.)	<b>03</b>	
	Has a clear verbal expression and eye contact with audience	<b>03</b>	
Response to questions (Max marks-09)	Answers question(s) correctly	<b>03</b>	
	Has the ability to think on the spot	<b>03</b>	
	Shows an ability to defend content of presentation	<b>03</b>	
Time Management (Max. mark-05)	Completes the presentation within allocated time	<b>05</b>	
<b>Total Marks</b>		<b>50</b>	

**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 PRESENTATION

MPT- 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 seminar examination of 100 marks will be distributed:

Cases during clinical posting=**45 marks**.

Viva voce =**50 marks**

Attendance=**5 marks**

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

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>						<b>SDGs No.</b>	
<b>PT606</b>	<b>SEMINAR ON CLINICAL ISSUES</b>	Empleyability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	<b>3,4,11</b>
		√	√	√	√		√	√	



## Integral University, Lucknow

Effective from Session: 2016-17							
Course Code	PT607	Title of the Course	CLINICAL POSTING	L	T	P	C
Year	II	Semester	III	0	0	14	7
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.						

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

### CLINICAL POSTING ASSESSMENT FORM

<b>Name of Student:</b>		<b>Session:</b>	
<b>Enrolment Number:</b>		<b>Date:</b>	
<b>Name of Subject:</b>	Clinical Posting	<b>Subject code:</b>	PT607
<b>Topics:</b>			

S. No.	Point to be Considered	Max. Marks	Marks Obtained
1.	Punctuality	5	
2.	Interaction with colleagues and supporting staff	5	
3.	Maintenance of case records	5	
4.	Presentation of case during rounds	5	
5.	Investigation work up	5	
6.	Bedside Manners	5	
7.	Rapport with patients	5	
8.	Treatment approach & technique	5	
9.	Discipline	5	
10.	Overall quality of clinical work	5	
<b>TOTAL SCORE</b>		<b>50</b>	

(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.	MPT	Ist Year/ Ist Semester	4 Months
2.		Ist Year/ IInd Semester	4 Months
3.		IInd Year/ 3rd Semester	4 Months
4.		IInd Year/ 4th 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.	MPT	Ist Year/ Ist Semester	20 Marks	25 Marks (1 Long Case and 2 Short Case)	50 Marks	5 Marks
2.		Ist Year/ IInd Semester				
3.		IInd Year/ 3rd Semester				
4.		IInd Year/ 4th Semester				

### EVALUATION OF CLINICAL POSTING

MPT- Students has to prepare 1 long case and 2 short cases during their clinical posting. The evaluation for internal clinical examination of 100 marks will be distributed:

Cases during clinical posting=**45 marks**.

Viva voce =**50 marks**

Attendance=**5 marks**

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

Course Code	Course Title	<b>Attributes</b>							<b>SDGs No.</b>	
<b>PT607</b>	<b>CLINICAL POSTING</b>	Emplo yability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	<b>3,4,11</b>	
		√	√	√	√		√	√		



**INTEGRAL UNIVERSITY, LUCKNOW**

**INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES**

**DEPARTMENT OF PHYSIOTHERAPY**

**MASTER OF PHYSIOTHERAPY**

**(MPT)**

**NEUROLOGY**

**SYLLABUS**

**YEAR/ SEMESTER: II/IV**



## Integral University, Lucknow

**Effective from Session: 2016-17**

Course Code	PT608N	Title of the Course	PHYSIOTHERAPY- III (NEUROLOGY REHABILITATION & ALTERNATIVE THERAPIES)	L	T	P	C
Year	II	Semester	IV	3	1	0	4
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	1. After a review of the latest theories of motor control, motor learning, and recovery of function, students are provided with a conceptual framework for clinical practice and a practical framework for understanding and examining impairments in patients with neurological deficits. 2. Armed with a solid foundation, students then build a thorough understanding of motor control issues as they relate to posture and balance, mobility, and upper extremity function. For each of these three key areas, the authors discuss normal control processes, age-related issues, abnormal function, and the clinical applications of current research.						

### Course Outcomes

CO1	Understanding and importance of documentation, clinical reasoning related to the uses of assistive technologies in various neurological condition.
CO2	Understanding about theoretical concept of postural control in rehabilitations.
CO3	Understanding about theoretical concept of mobility control in rehabilitations
CO4	Understanding and importance of reach, grasp & manipulation in rehabilitations.
CO5	Understanding about role of alternative techniques in rehabilitation.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	ASSISTIVE TECHNOLOGY IN NEUROLOGICAL POPULATION	Assistive Technology in neurological population with special focus on 1. Spinal cord injury. 2. Motor Neuron diseases. 3. Muscular dystrophies. 4. Hemiplegia. 5. Traumatic brain injury.	8	CO1
2	POSTURAL CONTROL	1. Normal Postural Control 2. Development of Postural Control 3. Aging and Postural Control 4. Abnormal Postural Control 5. Clinical Management of the Patient with a Postural Control Disorder	8	CO2
3	MOBILITY FUNCTION	1. Control of Normal Mobility 2. A Life Span Perspective of Mobility (a) Development of locomotion (b) Locomotion in Older Adults 3. Abnormal Mobility 4. Clinical Management of the Patient with a Mobility Disorder	8	CO3
4	REACH, GRASP, AND MANIPULATION	1. Normal Reach, Grasp, and Manipulation 2. Reach, Grasp, and Manipulation: Changes Across the Life Span a. Early development of reach grasp and manipulation b. Changes in older adults 3. Abnormal Reach, Grasp, and Manipulation 4. Clinical Management of the Patient With Reach, Grasp, and Manipulation Disorders	8	CO4
5	ALTERNATIVE AND COMPLEMENTARY THERAPIES	Beyond traditional approaches to intervention in neurological diseases, syndromes and disorders 1. Body weight support treadmill training (BWST) 2. Tai Chi 3. Cranio sacral therapy 4. Electroacupuncture 5. Biofeedback	8	CO5

### Reference Books:

1. Movement Science by Carr and Shepherd
2. Neurological rehabilitation by DARCY A. UMPHRED
3. Motor Control. Theory and Practical Applications. AS Cook, M Woollacott
4. A Motor Relearning Programme for Stroke. J Carr. R Shepherd
5. Motor Control and Learning. A Behavioral Emphasis. R A Schmidt

### e-Learning Source:

1. [http://www.di.fc.ul.pt/~tjvg/amc/emgtexting/files/ta\\_tr.pdf](http://www.di.fc.ul.pt/~tjvg/amc/emgtexting/files/ta_tr.pdf)
2. [https://www.researchgate.net/publication/292747102\\_Clinical\\_management\\_of\\_the\\_patient\\_with\\_a\\_postural\\_control\\_disorder](https://www.researchgate.net/publication/292747102_Clinical_management_of_the_patient_with_a_postural_control_disorder)
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6291756/>
4. <https://www.youtube.com/watch?v=EjsiXJ1JS60>
5. <https://www.youtube.com/watch?v=BHmW3m6IWDs>

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

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

### Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
PT608N	PHYSIOTHERAPY- III (N)	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√	√		√	√	



## Integral University, Lucknow

**Effective from Session: 2016-17**

Course Code	PT609N	Title of the Course	PHYSIOTHERAPY- III LAB (NEUROLOGY REHABILITATION & ALTERNATIVE THERAPIES)	L	T	P	C
Year	II	Semester	IV	0	0	4	2
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	1. After a review of the latest theories of motor control, motor learning, and recovery of function, students are provided with a conceptual framework for clinical practice and a practical framework for understanding and examining impairments in patients with neurological deficits. 2. Armed with a solid foundation, students then build a thorough understanding of motor control issues as they relate to posture and balance, mobility, and upper extremity function. For each of these three key areas, the authors discuss normal control processes, age-related issues, abnormal function, and the clinical applications of current research.						

Course Outcomes	
CO1	Understanding and importance of documentation, clinical reasoning related to the uses of assistive technologies in various neurological condition.
CO2	Understanding about theoretical concept of postural control in rehabilitations.
CO3	Understanding about theoretical concept of mobility control in rehabilitations.
CO4	Understanding and importance of reach, grasp & manipulation in rehabilitations.
CO5	Understanding about role of alternative techniques in rehabilitation.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	ASSISTIVE TECHNOLOGY IN NEUROLOGICAL POPULATION	Demonstration of application of Assistive devices in neurological disorder.	8	CO1
2	POSTURAL CONTROL	Demonstration of assessment, evaluation and management of normal postural and abnormal postural control.	8	CO2
3	MOBILITY FUNCTION	Demonstration of assessment, evaluation and management of normal postural and abnormal mobility control.	8	CO3
4	REACH, GRASP, AND MANIPULATION	Demonstration of assessment, evaluation and management of normal postural and abnormal reach, grasp & manipulation.	8	CO4
5	ALTERNATIVE AND COMPLEMENTARY THERAPIES	Demonstration of various alternative techniques which is effective for neurological rehabilitation.	8	CO5

**Reference Books:**

- Movement Science by Carr and Shepherd
- Neurological rehabilitation by DARCY A. UMPHRED
- Motor Control. Theory and Practical Applications. AS Cook, M Woollacott
- A Motor Relearning Programme for Stroke. J Carr. R Shepherd
- Motor Control and Learning. A Behavioral Emphasis. R A Schmidt

**e-Learning Source:**

- [http://www.di.fc.ul.pt/~tjvg/amc/emgtexting/files/ta\\_tr.pdf](http://www.di.fc.ul.pt/~tjvg/amc/emgtexting/files/ta_tr.pdf)
- [https://www.researchgate.net/publication/292747102\\_Clinical\\_management\\_of\\_the\\_patient\\_with\\_a\\_postural\\_control\\_disorder](https://www.researchgate.net/publication/292747102_Clinical_management_of_the_patient_with_a_postural_control_disorder)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6291756/>
- <https://www.youtube.com/watch?v=EjsiXJ1JS60>
- <https://www.youtube.com/watch?v=BHmW3m6IWDs>

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

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

**Attributes & SDGs Common**

Course Code	Course Title	Attributes						SDGs No.	
PT609N	PHYSIOTHERAPY- III LAB (N)	Emple yability	Entrepre neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√	√		√	√	



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

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	
		<b>Total Score</b>	<b>40</b>	

**Comments/Suggestions:**

**(Head, Physiotherapy)**

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

Attributes & SDGs Common for all branches / Disciplines									
Course Code	Course Title	Attributes							SDGs No.
PT610	Dissertation	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3.4.9. 17
		√	√	√	√		√	√	





## Integral University, Lucknow

<b>Effective from Session: 2016-17</b>							
<b>Course Code</b>	<b>PT611</b>	<b>Title of the Course</b>	<b>SEMINAR ON CLINICAL ISSUES</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>II</b>	<b>Semester</b>	<b>IV</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>				
<b>Course Objectives</b>	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.						

<b>Course Outcomes</b>	
<b>CO1</b>	The students will understand and interpret latest advancements through different technical papers, reports, Journals, Data sheets, books etc
<b>CO2</b>	The students will inculcate the skills for literature survey and will learn to manage resources effectively.
<b>CO3</b>	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.
<b>CO4</b>	The students will be able to communicate his/her ideas with his peers as audience, which will enhance both oral and written communications skills.
<b>CO5</b>	The students will be able to create interest to pursue lifelong learning.

### SEMINAR PRESENTATION ASSESSMENT FORM

<b>Name of Student:</b>		<b>Session:</b>	
<b>Enrollment Number:</b>		<b>Date:</b>	
<b>Name of Subject:</b>	Seminar on Clinical Issues	<b>Subject code:</b>	PT611
<b>Topics:</b>			

<b>Criteria</b>	<b>Sub-Criteria</b>	<b>Max. Marks</b>	<b>Marks Obtained</b>
Introduction (Max marks-09)	Use appropriate background information	03	
	Has clear statement of purpose	03	
	Shows a logical sequence	03	
Factual Content (Max marks- 21)	Includes accurate information	03	
	Shows up-to-date content	03	
	Presents relevant content	03	
	Shows in-depth and sufficient details	03	
	Addresses all important issues	03	
	Is selective	03	
	Use of proper English Grammar in the text	03	
Presentation Quality (Max marks-06)	Has a good design of presentation (appropriate font, type, size, color, matter per slide etc.)	03	
	Has a clear verbal expression and eye contact with audience	03	
Response to questions (Max marks-09)	Answers question(s) correctly	03	
	Has the ability to think on the spot	03	
	Shows an ability to defend content of presentation	03	
Time Management (Max. mark-05)	Completes the presentation within allocated time	05	
<b>Total Marks</b>		<b>50</b>	

**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 PRESENTATION

MPT- 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 seminar examination of 100 marks will be distributed:

Cases during clinical posting=**45 marks**.

Viva voce =**50 marks**

Attendance=**5 marks**

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

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>							<b>SDGs No.</b>
<b>PT611</b>	<b>SEMINAR ON CLINICAL ISSUES</b>	Emple yability	Entrep neurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	<b>3,4,11</b>
		√	√	√	√		√	√	





## Integral University, Lucknow

Effective from Session: 2016-17							
Course Code	PT612	Title of the Course	CLINICAL POSTING	L	T	P	C
Year	II	Semester	III	0	0	14	7
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	
<b>CO1</b>	To learn the punctuality and interaction with colleague and supporting staff during clinical training.
<b>CO2</b>	To develop assessment skills.
<b>CO3</b>	To develop appropriate treatment protocol.
<b>CO4</b>	To understand the importance of documentation of the case record and case presentation.
<b>CO5</b>	To develop discipline and improve overall quality of clinical work.

### CLINICAL POSTING ASSESSMENT FORM

<b>Name of Student:</b>		<b>Session:</b>	
<b>Enrolment Number:</b>		<b>Date:</b>	
<b>Name of Subject:</b>	Clinical Posting	<b>Subject code:</b>	PT513
<b>Topics:</b>			

S. No.	Point to be Considered	Max. Marks	Marks Obtained
1.	Punctuality	5	
2.	Interaction with colleagues and supporting staff	5	
3.	Maintenance of case records	5	
4.	Presentation of case during rounds	5	
5.	Investigation work up	5	
6.	Bedside Manners	5	
7.	Rapport with patients	5	
8.	Treatment approach & technique	5	
9.	Discipline	5	
10.	Overall quality of clinical work	5	
<b>TOTAL SCORE</b>		<b>50</b>	

(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
5.	MPT	Ist Year/ Ist Semester	4 Months
6.		Ist Year/ IInd Semester	4 Months
7.		IInd Year/ 3rd Semester	4 Months
8.		IInd Year/ 4th 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.	MPT	Ist Year/ Ist Semester	20 Marks	25 Marks (1 Long Case and 2 Short Case)	50 Marks	5 Marks
6.		Ist Year/ IInd Semester				
7.		IInd Year/ 3rd Semester				
8.		IInd Year/ 4th Semester				

### EVALUATION OF CLINICAL POSTING

MPT- Students has to prepare 1 long case and 2 short cases during their clinical posting. The evaluation for internal clinical examination of 100 marks will be distributed:

Cases during clinical posting=**45 marks**.

Viva voce =**50 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
<b>CO1</b>	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
<b>CO2</b>	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
<b>CO3</b>	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
<b>CO4</b>	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
<b>CO5</b>	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 Common for all branches / Disciplines**

Course Code	Course Title	Attributes							SDGs No.
<b>PT612</b>	<b>CLINICAL POSTING</b>	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	<b>3,4,11</b>
		√	√	√	√		√	√	