

STUDY & EVALUATION SCHEME

OF

MASTER OF PHYSIOTHERAPY

(MPT-II YEAR/ III SEMESTER)

[Applicable w.e.f. Academic Session 2019-20 till revised]



**INTEGRAL UNIVERSITY, LUCKNOW
DASAULI, P.O. BAS-HA KURSI ROAD,
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**Syllabus approved by Board of Study, Faculty Board, Academic
Council, Executive Council of the Integral University, Lucknow**

STUDY & EVALUATION SCHEME

MASTER OF PHYSIOTHERAPY (MPT)

(w.e.f. July 2019)

II Year

III Semester

S. No.	Subject Code	Name of Subject	Periods			Credits	Evaluation Scheme				Subject Total
			L	T	P		Sessional			Exam	
							CT	TA	Total	ESE	
1.	PT 601	Management, Education & Professional Ethics	3	1	0	4	25	15	40	60	100
2.	PT 602	Biomechanics and Kinesiology-II	3	1	0	4	25	15	40	60	100
3.	PT 603	Physiotherapy-II (M,N,C,S,G,B)	3	1	0	4	25	15	40	60	100
4.	PT 604	Biomechanics and Kinesiology-II Lab	0	0	4	2	50	50	100	--	100
5.	PT 605	Physiotherapy-III Lab (M,N,C,S,G,B)	0	0	2	1	30	30	60	40	100
6.	PT 606	Seminar on Clinical Issues	0	3	0	3	50	50	100	--	100
7.	PT 607	Clinical Training	0	0	14	7	50	50	100	--	100
Total			09	06	20	25	255	225	480	220	700

L: Lecture

T: Tutorials

P: Practical

CT: Class Test

TA: Teacher Assessment

ESE: End Semester Examination

Sessional Total: Class Test + Teacher Assessment

Subject Total: Sessional Total + End Semester Examination (ESE)

Subjects Code: M, N, C, S, G, B

M= Musculoskeletal Branch,

N= Neurology Branch,

C= Cardiopulmonary Branch

S= Sports Physiotherapy Branch

G= Obstetrics and Gynaecology Branch

B= Biomechanics Branch

**SUBJECT NAME: MANAGEMENT, EDUCATION & PROFESSIONAL
ETHICS**

**SUBJECT CODE: PT 601
(w.e.f. July 2015)**

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COURSE OBJECTIVES:

1. 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.
2. 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.
3. 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:

UNIT-I: MANAGEMENT:

(8 Hours)

1. Management - Functions of Management, Evolution of Management Through Scientific Management Theory, Classical Theory - Systems Approach - Contingency Approach.
2. Management Process - Planning, Organization, Direction, Controlling Decision Making
3. Introduction to Personal Management - Staffing Recruitment Selection, Performance Appraisal, Collective Bargaining, Discipline, Job Satisfaction
4. Quantitative Methods of Management - Relevance of Statistical and / or Techniques in Management.
5. Marketing - Market Segmentation, Marketing Research Production Planning Pricing, Channels of Distribution, Promotion, Consumer Behavior, and Licenses
6. Total Quality Management- Basis of Quality Management - Acid for Quality Control Quality Assurance Program in Hospitals, Medical Audit, and International Quality Systems.

UNIT-II ADMINISTRATION:

(8 Hours)

1. 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.

UNIT- III EDUCATION:

(8 Hours)

1. Philosophy of Education and Emerging issues in Education.
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).

3. Concept of Teaching and Learning: Meaning and Scope of Educational Psychology, meaning and relationship between teaching and learning.
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.

UNIT-IV

(8 Hours)

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.
2. Method and Techniques of Teaching: Lecture, Demonstration, Discussion, Seminar, Assignment, Project and Case Study.
3. Planning for Teaching: Bloom's Taxonomy of Instructional Objectives, Writing Instructional Objectives in Behavioral Terms. Unit Planning and Lesson Planning.
4. Teaching Aides: Types of Teaching Aides, Principles of Selection, Preparation, and Use of Audio-Visual Aides.
5. Clinical Education: Awareness and Guidance to the Common People about Health and Diseases and Available Professional Services, Patient Education, Education of the Practitioners.

UNIT-V: LEGAL PROFESSIONAL ETHICAL ISSUES:

(8Hours)

1. The Implications & Conformation to the Rules of Professional Conduct.
2. Code of Ethics.
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.
4. A Wider Knowledge of Ethics Relating to Current Social and Medical Policy in the Provisions of Health Care.
5. The Role of the International Health Agencies Such as the World Health Organizations.
6. Standards of Practice for Physiotherapists
7. Current Issues.

RECOMMENDED BOOKS: MANAGEMENT

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

RECOMMENDED BOOKS: EDUCATION

1. Principles of Education – Soti Shivendra Chandra and Rajendra K. Sharma
2. Philosophical Foundation of Education – Srinibas Bhattacharya
3. Sociological Foundation of Education – Srinibas Bhattacharya
4. Psychological Foundation of Education – Srinibas Bhattacharya

SUBJECT NAME: BIOMECHANICS & KINESIOLOGY-II

SUBJECT CODE: PT 602

(w.e.f. July 2015)

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COURSE OBJECTIVES: Students will be able to identify and apply principles of biomechanics while setting up individualized treatment protocols. Following are the topics to be included but not limited to:

UNIT-I KINESIOLOGY OF UPEER LIMB: (8 Hours)

Arthrology and Arthrokinematics, Kinetics, Pathokinesiology

1. Shoulder
2. Elbow
3. Wrist and Hand

UNIT-II KINESIOLOGY OF UPEER LIMB: (8 Hours)

Arthrology and Arthrokinematics, Kinetics, Pathokinesiology

1. Hip
2. Knee
3. Ankle and Foot

UNIT-III KINESIOLOGY OF SPINE: (8 Hours)

Arthrology and Arthrokinematics, Kinetics, Pathokinesiology

1. Cervical
2. Thoracic
3. Lumbar-sacral

UNIT-IV GAIT AND POSTURE: (8 Hours)

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

UNIT-V BIOMECHANICS OF ORTHOSIS & PROSTHESIS: (8 Hours)

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.

RECOMMENDED BOOKS:

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
6. Brunnstrom's Clinical Kinesiology. LK Smith, EL Weiss, LD Lehmkuhl
7. Kinesiology: Scientific Basis of Human Motion. K Luttgens, N Hamilton

SUBJECT NAME: PHYSIOTHERAPY-II
(MUSCULOSKELETAL SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 603M
(w.e.f. July 2015)

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COURSE OBJECTIVES: Clinical decision making-

1. Analysis of the process and knowledge necessary for identifying the neuromuscular tissue or system representing the origin of disorders in patients. Signs and symptoms from history and physical examination will be the focus with appropriate ancillary testing necessary to confirm hypotheses regarding musculoskeletal pathology. The intent is for students to be able to differentiate clusters of signs and symptoms and to make appropriate clinical decisions regarding same.
2. This subject will examine basic research process and investigative strategies by reviewing existing applied clinical literature. Students will know how to query a database and answer questions about their everyday practice as well as have necessary information to prepare peer reviewed , published manuscripts based on , multiple cases or experimental research.

UNIT-I: MUSCULOSKELETAL EXAMINATION OF THE UPPER QUADRANT:

(8 Hours)

The subject will include musculoskeletal examination, involving the shoulder, elbow, wrist and hand. Classes will include lecture, laboratory and clinical experiences.

UNIT-II: Musculoskeletal examination of the lower quadrant:

(8 Hours)

The subject will include musculoskeletal examination, involving the hip, knee, ankle foot. Classes will include lecture, laboratory and clinical experiences.

UNIT-III: Musculoskeletal examination of the lumbar pelvic spine:

(8 Hours)

The subject will include musculoskeletal examination, involving the lumbopelvic complex and hip. Classes will include lecture, laboratory and clinical experiences.

UNIT-IV: Musculoskeletal examination of the cervical and thoracic spine:(8 Hours)

The subject will include musculoskeletal examination, involving the lumbopelvic complex and hip. Classes will include lecture, laboratory and clinical experiences.

UNIT-V: Physiotherapy management in specific traumatic condition:

(8 Hours)

1. Trauma of the upper limb
2. Trauma of the lower limb
3. Trauma of the spine.
4. Amputation, Physiotherapy management, reviews of prosthetic types and construction, advantage and disadvantage.

RECOMMENDED BOOKS:

1. David J Magee Orthopaedic Physical Assessment.
2. S. Brent Brotzman. Kevin e wilk Clinical Orthopaedic Rehabilitation.
3. Kessler, Management of common musculoskeletal disorders.
4. Nicola. J.Petty, Neuromusculoskeletal Examination and Assessment
5. Saurabh Garg Essential of orthophysiotherapy for upper and lower limb fracture

SUBJECT: PHYSIOTHERAPY: II
(NEUROLOGICAL SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 603N
(W.e.f. July 2015)

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COURSE AIMS AND 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.

UNIT I: MANAGEMENT OF MOVEMENT DISABILITIES: (8 Hours)

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.

UNIT II: MANAGEMENT OF CLINICAL PROBLEMS: (8 Hours)

1. Multiple Sclerosis.
2. Amyotrophic Lateral Sclerosis.
3. Demyelinating Inflammatory Polyradiculoneuropathy.
4. Hemiplegia.
5. Gait Rehabilitation.

UNIT III: UNDERSTANDING MOTOR PERFORMANCE IN CHILDREN: (8 Hours)

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

UNIT IV: UNDERSTANDING MOTOR PERFORMANCE IN GERIATRICS: (8 Hours)

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.

UNIT V: FUNDAMENTALS OF THERAPEUTIC APPROACHES:**(8 Hours)**

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

RECOMMENDED 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

SUBJECT NAME: PHYSIOTHERAPY II
(CARDIOPULMONARY SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 603C
(W.e.f. July 2015)

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UNIT I - PRE-TEST CLINICAL EVALUATION IN EXERCISE TESTING (8 Hours)

- a) Medical history, physical examination, and laboratory tests
- b) Alternative stress tests
- c) Blood pressure
- d) Cholesterol and lipoproteins
- e) Blood profile analyses
- f) Pulmonary function
- g) Contraindication of exercise testing
- h) Informed consent
- i) Patient instruction

UNIT II -CARDIOPULMONARY FITNESS TESTING AND INTERPRETATION (8 Hours)

- a) Purpose of fitness testing
- b) Basic principles and guidelines
- c) Body composition
- d) Concept of maximal oxygen uptake
- e) Maximal verses sub-maximal exercise testing
- f) Modes of testing
- g) Cardiopulmonary test sequence and measures
- h) Test termination criteria

UNIT III - MAJOR MANIFESTATIONS OF HEART DISEASE & CARDIAC REHABILITATION (8 Hours)

I. Development, Intervention, and Prevention of Coronary Artery Disease

1. Atherosclerosis

- a) Process of Plaque Formation
- b) Acute Coronary Syndromes

2. Contemporary Revascularization Procedures

- a) Coronary Arteries and CAD
- b) Coronary Artery Bypass Surgery
- c) Percutaneous Coronary Interventions

3. Efficacy of Secondary Prevention and Risk Factor Reduction

- a) Cardiac Rehabilitation
- b) Prescription Drug Therapies
- c) Smoking
- d) Dyslipidemia
- e) Diabetes Mellitus
- f) Obesity
- g) Hypertension
- h) Sedentary Lifestyle
- i) Psychosocial Dysfunction
- j) Other Risk Factors
- k) Optimizing Secondary Prevention

4. Psychosocial Issues and Strategies

- a) Psychosocial Evaluation
- b) Psychosocial Interventions
- c) Promoting Adherence

UNIT IV ROLE OF EXERCISE IN HEART DISEASE: (8 Hours)

1. Exercise and the Coronary Heart Disease Connection

- a) Observational Data
- b) Cardiorespiratory Fitness and Coronary Death
- c) Exercise Training in Established Coronary Disease
- d) Risks of Acute Exercise
- e) Potential Mechanisms of Exercise Benefit

2. Cardiovascular and Exercise Physiology

- a) Energy Systems and Cellular Respiration
- b) Cardiopulmonary Response
- c) Perturbation of the Exercise Response in CVD
- d) Adaptations to Exercise Training

UNIT V. Electrocardiography in Heart Disease

- a) Electrodes and Leads
- b) Supraventricular Arrhythmias
- c) Ventricular Arrhythmias
- d) Atrioventricular (AV) Blocks
- e) Bundle Branch Blocks
- f) Myocardial Infarction and Ischemia
- g) ST Segment Deviations During Exercise
- h) ECG Monitoring Issues During Exercise

RECOMMENDED BOOKS:

1. Physiotherapy for Respiratory and Cardiac Problems - by Jennifer A. Pryor, S. Ammani Prasad
2. Lifestyle Management for Patients With Coronary Heart Disease; by Houston Miller
3. Training Techniques In Cardiac Rehabilitation; by Fardy, Paul
4. Coping With Heart Illness Video Pkg (NTSC); by Human Kinetics
5. Exercise Prescription for the High-Risk Cardiac Patient; by Squires, Ray
6. Physical Activity and Cardiovascular Health; by Leon, Arthur,
7. Advances in Cardiopulmonary Rehabilitation: by Jobin, Jean
8. Coronary Artery Disease; Author: Brubaker, Peter
9. Advancing the Frontiers of Cardiopulmonary Rehabilitation; by Jobin, Jean
10. Exercise and Circulation in Health and Disease; by Saltin, Bengt
11. Exercise Prescription-2nd Edition; by Swain, David P
12. Clinical Exercise Physiology; by Ehrman, Jonathan.

SUBJECT NAME: PHYSIOTHERAPY-II
(SPORTS SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 603S
(W.e.f. July 2015)

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COURSE OBJECTIVES:

This course provides students with the principles of Physiotherapy management in sports related injuries and in sports training and the application of these principles in specific disorders. Through lectures, case conferences, journal discussions and class discussions students will be able to set up a treatment programme tailored to the patient's needs. **Following are the topics to be included but not limited to:**

UNIT-I SPORTS BIOMECHANICS: (8 Hours)

Basic principles of biomechanics are reinforced with added emphasis on the changes in biomechanical function and their subsequent effect on the potential and influence on overuse injuries.

1. Biomechanics Running
2. Biomechanics Throwing
3. Biomechanics Jumping,
4. Biomechanics Swimming

The student to analyze, explain and correct abnormal human movement of the above Sports Biomechanics using a variety of evaluative techniques and computerized tools.

UNIT-II SPORTS ERGONOMICS: (8 Hours)

A study of the sporting environment and its effect on injury mechanism, prevention and rehabilitation. The principles of injury pathomechanics, tissue responses to loading and the role of sports equipment in sports injury prevention and rehabilitation. The following specific areas will be studied:

1. Mechanical support to the body - taping, splinting, braces, orthotics.
2. Protective equipment - body padding, mouthguards, helmets, headgear, etc.,
3. Sport-specific problems.
4. Shoe-surface interaction (Athletic Shoes) - footwear design, surface characteristics, traction, various modifications and adaptations in shoes for specific situations and conditions. The evaluation of shoes and shoe prescription.

UNIT-III: KINANTHROPOMETRY IN SPORTS: (8 Hours)

- | | |
|--------------------------------------|--------------------------|
| 1. Introduction to kin anthropometry | 2. Evaluation techniques |
| 3. Body composition | 4. Somatotyping |

UNIT-IV: ERGOGENIC AIDS & DOPING: (8 Hours)

- | | |
|----------------|---------------------|
| 1. Doping, | 2. Types of doping, |
| 3. TUEC, | 4. Blood Doping. |
| 5. Gene Doping | |

UNIT-V SPORTS NUTRITION: (8 Hours)

1. Introduction to sports nutrition
2. Special considerations for competitive athletes & Energy needs of the athlete
3. Pre-competition meals
4. Content of pre-competition meals, Glucose and insulin responses of pre-competition meals.
5. Glycogen loading (super compensation)

RECOMMENDED BOOKS:

1. Prentice, William E., Rehabilitation Techniques in Sports Medicine, St. Louis: McGraw Hill Publishing Company.
2. Gray, Gary W., Lower Extremity Functional Profile, 1st Edition, Adrian, MI: Wynn Marketing.
3. Prentice, W. "Therapeutic Modalities for Allied Health Professionals" McGraw Hill.
4. Reed: Sports Injuries - Assessment and Rehabilitation, W.B. Saunders.
5. William E. Prentice: Rehabilitation Techniques - Mosby.
6. Werner Kuprian: Physical Therapy for Sports, W.B. Saunders.
7. Ed. Burke & Deakin. Clinical Sports Nutrition, 3rd ed., McGraw-Hill
8. Exercise physiology, Katch And Katch, Mccardle

SUBJECT NAME: PHYSIOTHERAPY-II
(GENERAL OBSTETRIC AND GYNAECOLOGICAL MANAGEMENT)
SUBJECT CODE: PT 603G
(W.e.f. July 2019)

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UNIT-I (ANTENATAL CARE)

(8 Hours)

1. Concept, principles and organization of antenatal exercises
2. Role of PT in antenatal complication
3. Antenatal and early bird classes
4. Ergonomics and diet ,weight gain during pregnancy

UNIT-II (PT MANAGEMENT DURING LABOUR)

(8 Hours)

1. Preparation and education
2. Relaxation
3. Breathing, techniques and alteration during labour
4. Positioning and massage during labour

UNIT-III (POSTNATAL CARE)

(8 Hours)

1. Concepts, principles and organization of postnatal classes.
2. PT management of immediate postnatal problems
3. PT management of late postnatal problems
4. Ergonomics and diet ,weight management, physical fitness

UNIT-IV (BREAST FEEDING)

(8 Hours)

1. Breast milk, its advantages
2. Breast feeding positions, Common problem in Breast feeding
3. Breast engorgement and its PT management
4. Types of nipples and its problems.

UNIT-V (THERAPEUTIC INTERVENTION)

(8 Hours)

1. Electrotherapy modalities in obstetrics & Gynaecological physical impairment
2. Swiss ball and theraband exercises
3. Vaginal cones and perineometer
4. Soft tissue manipulation

RECOMMENDED BOOKS

1. Physiotherapy in Obstetrics and Gynaecology ; Margaret Polden Jill Mantle Jay Pee
2. Therapeutic Management of Incontinence and Pelvic Pain by J. Laycock and J. Haslam
3. Women's Health: A Textbook for Physiotherapists by Ruth Sapsford, Joanne Bullock-Saxton and Sue Markwell Bphty.
4. Obstetric and Gynaecologic Physical Therapy by E. Wilder
5. Physiotherapy in Pregnancy: Antenatal, Postnatal and Baby Care by Balaji Hiranandani.

SUBJECT NAME: PHYSIOTHERAPY-II
(BIOMECHANICAL SPECIFIC PHYSICAL THERAPY ASSESSMENT)
SUBJECT CODE: PT 603B
(W.e.f. July 2019)

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UNIT I- (BIOMECHANICAL ASSESSMENT OF SHOULDER, ELBOW, WRIST, HAND DYSFUNCTION AND DERANGEMENT) (8 Hours)

1. Muscular imbalance.
2. Abnormal motion.
3. Soft tissue.
4. Biomechanical Functional assessment.

UNIT II- (BIOMECHANICAL ASSESSMENT OF HIP, KNEE, ANKLE, FOOT DYSFUNCTION AND DERANGEMENT) (8 Hours)

1. Muscular imbalance.
2. Abnormal motion.
3. Soft tissue.
4. Biomechanical functional assessment.

UNIT III- (BIOMECHANICAL ASSESSMENT OF TMJ, ATLANTO-OCCIPITAL, CERVICOTHORACIC, LUMBOPELVIC DYSFUNCTION AND DERANGEMENT) (8 Hours)

1. Muscular imbalance.
2. Abnormal motion.
3. Soft tissue.
4. Biomechanical functional assessment.

UNIT IV- (QUALITATIVE BIOMECHANICAL OCCUPATIONAL ASSESSMENT) (8 Hours)

1. Sitting Job workers (White color)
2. Motor Vehicle driver, Carpenter
3. Mason, Plumber, Electrician
4. Work place assessment

UNIT V- (BIOMECHANICAL ASSESSMENT OF COMMON ADL URBAN /RURAL CULTURE) (8 Hours)

1. Feeding
2. Bathing
3. Grooming
4. Dressing

RECOMMENDED BOOKS

1. Brunnstrom's Clinical Kinesiology - Laura K. Myth et al., Publishers - F.A. Davis.
2. Clinical Biomechanics of Spine - White A.A. and Panjabi - J.B. Lippincot, Philadelphia.
3. Biomechanical Basis of Human Movement - Joe Hamill and Knutsen Publishers - Williams and Wilkins.
4. Kinesiology of the Human Body under normal and pathological conditions Arthur Steindler
5. Scientific Basis of Human Movement - Gowitzke, Williams & Wilkins, Baltimore, 1988, 3rd Edition

SUBJECTNAME: BIOMECHANICS AND KINESIOLOGY-II LAB
SUBJECT CODE: PT 604
(w.e.f. July 2015)

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Students will be able to identify and apply principles of biomechanics while setting up individualized treatment protocols. Following are the topics to be included but not limited to. This involves application of topics in demonstrations, field visits and case presentations.

SUBJECT CODE: PHYSIOTHERAPY-II LAB
(MUSCULOSKELETAL SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 605M
(w.e.f. July 2015)

L T P
0 0 2

Students will be instructed via demonstration, hands on techniques, field visits and case conference on specific techniques used in the management of patients with musculoskeletal disorders. Students will draw on their experiences at the experiences at the clinical postings to formulate a treatment plan for case presented at the case conference.

SUBJECT CODE: PHYSIOTHERAPY-II LAB
(NEUROLOGICAL SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 605N
(w.e.f. July 2015)

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0 0 2

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.

SUBJECT NAME: PHYSIOTHERAPY-II LAB
(CARDIOPULMONARY SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 605C
(w.e.f. July 2015)

L T P
0 0 2

Students will be instructed via demonstrations, hands on techniques, field visits and case conferences on specific techniques used in management of patients with cardiopulmonary disorders. Students will draw on their experiences at the clinical postings to formulate a treatment plan for cases presented at the case conference.

**SUBJECT NAME: PHYSIOTHERAPY-II LAB
(SPORTS SPECIFIC PHYSICAL THERAPY AND REHABILITATION)
SUBJECT CODE: PT 605S
(w.e.f. July 2015)**

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0 0 2**

Students will be instructed via demonstrations, hands-on techniques, field visits and case conferences on specific techniques used in management of patients with sports injuries. Students will draw on their experiences at the clinical postings to formulate a treatment plan for cases presented at the case conference.

SUBJECT NAME: PHYSIOTHERAPY-III LAB
(OBSTETRICS AND GYNAECOLOGICAL PHYSIOTHERAPY MANAGEMENT)
SUBJECT CODE: PT 605G
(w.e.f. July 2019)

L T P
0 0 2

Students will be instructed via demonstration, hands on management, hospital visits and case presentation on specific intervention used in the management of patients with obstetrics and gynaecological disorders. Students will draw on their experiences at the clinical postings to formulate a management plan for case presented at conference.

**SUBJECT NAME: PHYSIOTHERAPY-III LAB
(SPECEFIC BIOMECHANICAL ASSESSMENT)**

**SUBJECT CODE: PT 605B
(w.e.f. July 2019)**

**L T P
0 0 2**

Students will be instructed via demonstration, hands on specific assessment, field, hospital visits and case presentation on specific biomechanical assessment used in the assessment of patients with biomechanical dysfunction. Students will draw on their experiences at the clinical postings to formulate a specific biomechanical assessment plan for case presented at conference.

SUBJECT NAME: SEMINAR ON CLINICAL ISSUES
SUBJECT CODE: PT 606
(w.e.f. July 2015)

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These 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. Students will present on topics provided to them.

CHECK LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the students:

Date:

Topic:

Marks: 50

S.No.	Item for observation during presentation	Poor (0)	Below Average (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)
1.	Introduction						
2.	Review of Literature						
3.	Recent Development						
4.	Clarity of presentation						
5.	Understanding of subject						
6.	Ability to answer the questions						
7.	Time management						
8.	Appropriate use of audio/visual aids						
9.	Overall performance						
10.	Any other observations						
	TOTAL						

Comments:

Name signature of the faculty/observer:

HOD
Department of Physiotherapy

SUBJECT NAME: CLINICAL TRAINING
SUBJECT CODE: PT 607
(w.e.f. July 2015)

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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.

MODEL CHECKLIST FOR EVALUATION OF CLINICAL TRAINING

Name of Student:

Month:

Name of Faculty/ Supervisor:

Date:

S. No.	Point to be Considered	Poor (0)	Below Average (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)
1.	Punctuality						
2.	Interaction with colleagues and supporting staff						
3.	Maintenance of case records						
4.	Presentation of case during rounds						
5.	Investigation work up						
6.	Bedside Manners						
7.	Rapport with patients						
8.	Treatment approach & technique						
9.	Discipline						
10.	Overall quality of clinical work						
	TOTAL SCORE						

Comments:

Signature of Faculty/ Supervisor

HOD
Department of Physiotherapy