

Level 3000- Semester 1

Course No	: PT 3101
Course Title	: Pediatric Physiotherapy I
Credits	: 02
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation:	: Lectures-30hrs
Aims and / or objectives and / or Intending learning outcomes:	
At the successful completion of the course, the students will be able to:	
1. Identify common paediatric conditions which the therapist would encounter in their practice	
Course syllabus / Course Description	
Normal Growth and development of child :Motor, mental, language and social, Common infectious diseases in children: Brief description of following infectious diseases along with outline of management:Tetanus, diphtheria, Mycobacterial, measles, chicken pox, and gastroenteritis, Child and nutrition :Nutritional requirements, malnutrition syndrome, Vitamins (A, B, C, D & K) and Minerals (iron, calcium phosphorus, iodine) deficiencies in children and management in brief, Clinical presentation, management & prevention of the following : Cerebral palsy, Poliomyelitis, Muscular dystrophy, Childhood rheumatism :Types, clinical presentation, & management in brief, Acute CNS infections: Clinical presentation, complications and management, Clinical presentation, management & prevention of the following cardiac conditions: Rheumatic heart disease, sub acute bacterial endocarditis (SABE), Congenital heart disease - ASD,VSD, PDA	
Recommended Texts (if any):	
<ul style="list-style-type: none"> • Robert M. Kliegman, Bonita M.D. Stanton, Joseph St. Geme and Nina F Schor, ;Nelson Textbook of Pediatrics, 20th edition 	
Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20 %
End Semester Examination	80 %

Course No	: PT 3102
Course Title	: Musculoskeletal Physiotherapy for upper limb
Credits	: 03
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures-38hrs, Practicals-14hrs
Aims and / or objectives and / or Intending learning outcomes:	
At the successful completion of the course, the students will be able to:	
1. describe the pathological conditions and injuries that affect bones, muscles, ligaments and joints in the upper limbs	
2. plan physiotherapy treatment programmes with most suitable interventions to rehabilitate the affected individuals in acute and chronic stages of musculoskeletal injuries affecting the upper limbs	

Course syllabus / Course Description

Physiotherapy assessment for Orthopaedic conditions, Fractures of upper limbs, soft tissue injuries, Fractures and dislocations of upper limbs, Principles of various schools of thought in manual therapy, Shoulder joint, Elbow and forearm, Wrist and Hand

Recommended Texts (if any):

Wise C, (2015). Orthopaedic Manual Physical Therapy: From Art to Evidence. FA Davis. ISBN-13: 978-0-8036-1497-0

Kisner C and Colby LA (2017). Therapeutic Exercise: Foundations and Techniques, 7th Edition. FA Davis. ISBN-13: 978-0803625747

Magee DJ (2013). Orthopedic Physical Assessment, 6th ed, WB Saunders. ISBN-13: 978-1455709779

Cook CE (2012). Orthopedic Manual Therapy: An Evidence-Based Approach, 2nd ed, Pearson. ISBN-13: 978-0138021733

Mulligan BR (2010). Manual Therapy: NAGS, SNAGS, MWMS etc., 6th ed. Plane View Services, New Zealand.

Gulick D (2013). Ortho Notes: Clinical Examination Pocket Guide, 3rd ed. FA Davis. ISBN-13: 978-0803638242

Other Recommended Resources:

PhysioU app. <http://www.physiou.com/>

Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	30 %
End Semester Examination	70 %

Course No : PT 3103

Course Title : Neurological Physiotherapy II

Credits : 03

Prerequisite : None

Compulsory / Optional : Compulsory

Time Allocation : Lectures-38hrs, Practicals-14

Aims and / or objectives and / or Intending learning outcomes:

At the successful completion of the course, the students will be able to:

1. assess and identify various neurological conditions caused due to injury, pathology and of unknown origin.
2. plan treatment programmes with most suitable interventions to rehabilitate the affected individuals in acute and chronic stages

Course syllabus / Course Description

Physiotherapy assessment for Neurological/Neurosurgical conditions, Evaluation and management of brain and spinal cord disorders, , Evaluation and management of cerebellar, spinal cord and muscle disorders, Evaluation and management of peripheral nerve injuries and disorders, Pre and post neurosurgical assessment and management – based on above concepts.

Recommended Texts (if any):

- O' Sullivan, S.B. and Schmitz, T.J. Physical rehabilitation. E.A.Davis Company. Philadelphia.
- Bobath B. (1990) Adult Hemiplegia; Evaluation and Treatment
- Haerer A.F. (1992) DeJong's The Neurological Examination
- Stokes, M. and Stack, E. (2012). Physical Management for Neurological Conditions. Elsevier. Chuechill. Livingstone.
- Dwnie, P.A. (1993) Cash's Textbook of Neurology for Physiotherapists. Jaypee brothers. Gopsons papers ltd, India.

Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	10 %
End Semester Examination	90 %

Course No. : PT 3104

Course Title : Common Medical Obstetrics and Gynecological conditions for Physiotherapists II

Credits : 02

Prerequisite : None

Compulsory / Optional : Compulsory

Time Allocation : Lecture- 25hrs, Practicals-10hrs

Aims and / or objectives and / or Intending learning outcomes:

At the successful completion of the course, Student will be able to ,

1. assess and identify various medical, obstetrics and gynecological conditions
2. plan physical therapy treatment programmes with most suitable interventions to rehabilitate affected individuals in acute and chronic stages

Course syllabus / Course Description

Physiotherapy in pathological changes; inflammation and oedema, physiotherapy in deficiency diseases, physiotherapy in common diseases of Skin, physiotherapy in Obstetrics and Gynecological Conditions, physiotherapy in Psychiatric disorders

Recommended Texts (if any) :

- Kisner C, Colby LA. (2007) *Therapeutic exercise, Foundations and Techniques*. 5th edition. Philadelphia. F.A.Davis Company. p. 797-824.
- Porter, S.B. (2003) *Tidy's Physiotherapy*. 13th edition. Elsevier. Martins the printers. P. 157-182.

- Physiotherapy in Obstetrics and Gynecology by Polden

Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20%
End Semester Examination	80%

Course No.	: PT 3105
Course Title	: Cardio-respiratory and general Surgical conditions for Physiotherapists II
Credits	: 03
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures-40hrs, Practical-10hrs
Aims and / or objectives and / or Intending learning outcomes:	
At the successful completion of the course, Student will be able to:	
<ol style="list-style-type: none"> 1. assess and identify various cardiac, respiratory, vascular and surgical conditions 2. plan physical therapy treatment programs with most suitable interventions to rehabilitate affected individuals in acute and chronic stages 	
Course syllabus / Course Description	
Evaluation, principles and techniques of physiotherapy management in cardiac and respiratory conditions, Management of wound ulcers, cardiac and Pulmonary Rehabilitation, pre and post-operative physiotherapy management for cardiothoracic, abdominal and vascular surgeries, role of a physiotherapist in ICU, physiotherapy assessment and management of burns, Physiotherapy intervention in the management of Medical, Surgical Oncology.	
Recommended Texts (if any) :	
<ul style="list-style-type: none"> • Cash's Text Book of Chest, Heart, Vascular Disorders for Physiotherapists. • Essentials of Cardio Pulmonary Physical Therapy by Hillegass and Sadowsky • Cardio pulmonary Symptoms in physical Therapy practice Cohen and Michel • Chest Physiotherapy in Intensive Care Unit by Mackenzi • Cash's Text book of General Medicine and Surgical conditions for Physiotherapists. • Physical Therapy for the Cancer patient by M.C Garvey 	
Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20 %
End Semester Examination	80%

Course No.	: PT 3106
Course Title	: Physiotherapy in Burns
Credits	: 02
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation:	Lectures-25hrs, Practical-10hrs

Aims and / or objectives and / or Intending learning outcomes:

At the successful completion of the course, Students will be able to,

1. manage the patients with burns in different stages
2. plan pre & post- surgical physiotherapy management in patients with burns

Course syllabus / Course Description

Co-relate the anatomy, physiology & pathology with burns, manage the patients with burns in the stages of acute, chronic & rehabilitation, pre & post-surgical physiotherapy management, importance of nutrition in the process of healing of wounds

Recommended references:

- 1) Physiotherapy for burns and plastic reconstruction of the hand, Glassy, Nicole
- 2) Principles & Practice of Burns Management, Settle, John A D

Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20%
End Semester Examination	80%

Level 3000- Semester 2

Course No	: PT 3201
Course Title	: Musculoskeletal Physiotherapy for spine & lower limb
	: 03
Credits	: None
Prerequisite	
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures-38hrs, Practicals-14hrs
Aims and / or objectives and / or Intending learning outcomes:	
<p>At the successful completion of the course, the students will be able to:</p> <ol style="list-style-type: none"> 1. identify the pathological conditions and injuries that affect bones, muscles, ligaments and joints of the lower limbs and spine in relation to physiotherapy 2. identify the postural abnormalities, deformities and abnormal movements occurring due to an injury, pathology and/ or unknown causes 3. plan physiotherapy treatment programmes with most suitable interventions to rehabilitate the affected individuals in acute and chronic stages of lower limb and spinal abnormalities 	
Course syllabus / Course Description	
<p>Fractures of lower limbs and vertebral column, Degenerative and Inflammatory conditions, Infective conditions, Define, review the postural abnormalities of spinal column, Deformities, Cerebral palsy, Poliomyelitis, Amputations, Spinal conditions, Effects of spinal traction, Osteoporosis, Rehabilitation after orthopaedic surgeries- total knee replacement (TKR), total hip replacement (THR), Hip, Knee, Ankle and foot.</p>	
Recommended Texts (if any):	
<p>Kisner C and Colby LA (2017). Therapeutic Exercise: Foundations and Techniques, 7th Edition. FA Davis. ISBN-13: 978-0803625747</p>	
<p>Magee DJ (2013). Orthopedic Physical Assessment, 6th ed, WB Saunders. ISBN-13: 978-1455709779</p>	
<p>Cook CE (2012). Orthopedic Manual Therapy: An Evidence-Based Approach, 2nd ed, Pearson. ISBN-13: 978-0138021733</p>	
<p>Mulligan BR (2010). Manual Therapy: NAGS, SNAGS, MWMS etc., 6th ed. Plane View Services, New Zealand.</p>	
<p>Gulick D (2013). Ortho Notes: Clinical Examination Pocket Guide, 3rd ed. FA Davis. ISBN-13: 978-0803638242</p>	
<p>Kaltenborn F, (2008) Manual Mobilization of the Joints: Volume III Traction-Manipulation of the Extremities and Spine, Norli, Oslo Norway.</p>	
<p>McKenzie R, May S, (2006). The Cervical & Thoracic Spine: Mechanical Diagnosis & Therapy, Vol I and II, 2nd ed. Spinal Publications, New Zealand.</p>	
<p>Hengeveld E, Banks K, Eds (2013). Maitland's Vertebral Manipulation: Management of Neuromusculoskeletal Disorders - Volume 1, 8th ed. Elsevier.</p>	

Other Recommended Resources:

PhysioU app. <http://www.physiou.com/>

Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20 %
End Semester Examination	80 %

Course No	: PT 3202
Course Title	: Pediatric Physiotherapy II
Credits	: 03
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures- 36 hrs, Practicals- 18hrs
Aims and / or objectives and / or Intending learning outcomes:	
At the successful completion of the course, the students will be able to:	
1. to integrate the knowledge gained by the student in Neurological and cardio-respiratory physiotherapy thus enabling them to apply these in rehabilitating patients with paediatrics conditions	
Course syllabus / Course Description	
Developmental milestones and reflexes, Physiotherapy assessment in general paediatric conditions and neonatal respiratory conditions, Physiotherapy assessment and treatment of Cerebral palsy, Down's syndrome, Syringomyelia, Spina bifida, Muscular dystrophy, Autism, Juvenile arthritis and congenital heart diseases.	
Recommended Texts (if any):	
<ul style="list-style-type: none"> • Roberta Shepherd ; 3rd edition; Physiotherapy in paediatrics 	
Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20 %
End Semester Examination	80 %

Course No.	: PT 3203
Course Title	: Physiotherapy in Sports
Credits	: 04
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures-50hrs, Practicals-20hrs
Aims and / or objectives and / or Intending learning outcomes:	
At the successful completion of the course, the students will be able to:	
1. identify injuries common to several sports	
2. plan out management and prevention of sports injuries	
3. formulate proper rehabilitation protocols according to the type of sport and injury	
4. coordinate and work with players and other members	
5. prepare players (fitness, conditioning, diet, psychological aspect) to relevant sport events	

Course syllabus / Course Description	
Injuries common to several fields in sports, Prevention & management of injuries , Psychology in sports, Doping and Banned substance in Sports, Obesity and Sports, Physical Fitness and Sports, Sports Biomechanics, Role of a Coach in Sports, Nutrition for Optimum Sports Performance, Traveling with a Sports Team, Warm up and recovery strategies, Introduction to taping	
Recommended Texts (if any):	
<ul style="list-style-type: none"> • Karageanes S J. (2005) . Privciples of Manual Sports Medicine. • Brukner p, Khan K. Clinical Sports Medicine. • Dwyer G B, Davis S E. ACSM’s Health-Related Physical Fitness Assessment Manual. 2nd edition 	
Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20 %
End Semester Examination	80 %

Course No.	: PT 3204
Course Title	: Evidence Based Practice in Physiotherapy
Credits	: 02
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures-23hrs, Practicals-14hrs
Aims and / or objectives and / or Intending learning outcomes:	
At the successful completion of the course, the students will be able to:	
<ol style="list-style-type: none"> 1. discuss the concepts of evidence based practice in physiotherapy. 2. identify the importance of evidence based practice in physiotherapy. 3. demonstrate the ability to critically appraise the literature available. 4. discuss the responsibilities and contribution of the physiotherapists in Evidence Based Practice 	
Course syllabus / Course Description	
Introduction to Evidence Based Practice, Concepts of Evidence based Physiotherapy, Development of Evidence based knowledge, The Individual Professional, Professionals within a discipline, Professionals across disciplines, Evidence Based Practitioner, Finding the Evidence, Searching for the Evidence, Assessing the Evidence, Systematically reviewing the evidence, Economic evaluation of the evidence, Using the evidence, Practice guidelines, algorithms, and clinical pathways, Communicating evidence to clients, managers and funders, Research dissemination and transfer of knowledge	
Recommended Texts (if any):	
<ul style="list-style-type: none"> • Herbert, R., Jamtvedt, G., Mead, J., Hagen, K.B. (2005). <i>Practical Evidence Based Physiotherapy</i>. Elsevier. Butterworth- Heinmann. • Melnyk, B., & Fineout-Overholt, E. (2015). <i>Evidenced based practice in nursing and healthcare: A guide to best practice</i> (3rd ed.). Philadelphia, PA: Walters Kluwer 	
Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	20%
End Semester Examination	80%

Course No	: PT 3205
Course Title	: Basic Research Methodology
Credits	: 03
Prerequisite	: None
Compulsory / Optional	: Compulsory
Time Allocation	: Lectures- 45hrs
Aims and / or objectives and / or Intending learning outcomes:	
<p>At the successful completion of the course, the students will be able to:</p> <ol style="list-style-type: none"> 1. explain the notion of truth and its position within the philosophy of science and the principles of evidence-based practice; 2. evaluate and employ the principles and characteristics of quantitative and qualitative research methods and analysis 3. collect, analyse, interpret and summarise data 4. describe the theoretical principles and practice characteristics of participating inquiry; 5. debate the political and ethical issues within the practice of research; 6. develop a research consciousness in relation to practice activities within their define area of practice. 	
Course syllabus / Course Description	
<p>Philosophy of science and the notion of truth, principles of evidence based practice and clinical effectiveness/efficiency, traditions, preferences and positions in applied qualitative research, narrative methodologies and their use in clinical/professional practice, quantitative reasoning and its application in clinical/professional practice, data gathering tools/approaches – qualitative and quantitative methods and analysis, practice based inquiry/participative inquiry/generating evidence based practice, case studies, ethics in research, describe the foundations used for ethical decision-making, patients’ rights, need of a code of ethics for practice.</p> <p>Additive and non-additive ANOVA models, Mean separation, incidence data and proportions, odds and odds ratios, models for proportions, non–parametric methods for two–sample case; independent sample and paired observations, non–parametric methods for data from designed experiment</p>	
Recommended references:	
<ol style="list-style-type: none"> 1) Marshall, Rossman G., Designing qualitative Research (1999), sage Research Projects Health Systems Training Series Vol. 2 	
Assessment	Percentage Mark / Percentage Mark Range
Continuous Assessment	25 %
End Semester Examination	75%