छत्रपति शाहू जी महाराज विश्वविद्यालय, कानपुर

CHHATRAPATI SHAHU JI MAHRAJ UNIVERSITY, KANPUR

(पूर्ववर्ती कानपुर विश्वविद्यालय कानपुर)

Formerly Kanpur University, Kanpur – 208024

A Documentary Support

For

Matric No. – 1.1.1

Programme Outcomes & Course Outcomes

Under the

Criteria - I

(Curriculum Design and Development)

Key Indicator - 1.1

In

Matric No. – 1.1.1

Bachelor of Physical Education

Co-ordinator
Internal Quality Assurance Cell
CSJM University, Kanpur

(Registrar)
C.S.J.M.University
Kanpur

REGISTRAR
C.S.J.M. UNIVERSITY
KANPUR

BPT
Program objectives and outcome

Learning Objectives: At the completion of this course, the student should be –

1. The purpose of this curriculum is to delineate the cognitive, affective and psychomotor skills deemed essential for completion of this program and to perform as a competent physiotherapist who will be able to examine, evaluate, diagnose, plan, execute and document physiotherapy treatment independently or along with the multidisciplinary team.

2. Evaluate patients for impairments and functional limitations and able to execute all routine physiotherapeutic procedures as per the evaluation.

3. Able to operate and maintain physiotherapy equipment used in treatment of patient, physiotherapy treatment planning (both electrotherapy and exercise therapy) & procedures independently.

4. Able to provide patient education about various physiotherapeutic interventions to the patient and care givers.

Program Outcomes

1. Coursework entitles independent physiotherapy assessment and treatment in any healthcare delivery centers in India by the graduates.

2. The coursework is designed to train students to work as independent physiotherapists or in conjunction with a multidisciplinary team to diagnose and treat movement disorders as per red and yellow flags.

3. Course works will skill the graduate's physical/ functional diagnosis, treatment planning, management, administration of physiotherapy treatment and for patient support.

4. Graduates can found employment opportunities in hospitals/nursing homes/sports teams/fitness centers/Community Rehabilitation /Health planning boards/health promotions services in both private and public sectors as well as in independent physiotherapy clinics.

5. Physiotherapy graduate is encouraged to pursue further qualification to attain senior position in the professional field and also to keep abreast with the recent advances, new technology and research. The professional should opt for continuous professional education credits offered by national and international institutes.

Program specific outcomes:

1. The graduate will be a competent and reflective physiotherapy practitioner who can function safely and effectively while adhering to legal, ethical and professional standards of practice in a multitude of physiotherapy settings for patients and clients across the lifespan and along the continuum of care from wellness and prevention to rehabilitation of dysfunction.

2. The graduate will utilize critical inquiry and evidence based practice to make clinical decisions essential for autonomous practice.

3. The graduate will function as an active member of professional and community organizations. The graduate will be a service-oriented advocate dedicated to the promotion and improvement of community health.

4. The graduate will demonstrate lifelong commitment to learning and professional development.

BACHELOR OF PHYSIOTHERAPY 1 YEAR

ANATOMY (BPT 101)

THEORY

COURSE OBJECTIVES - It is designed to provide students with the working knowledge of the structure of the human body which is essential foundation for their clinical studies. The study of anatomy will include identification of all gross anatomical structures. Particular emphasis will be placed on description of bones, joints, muscles, the brain, cardio pulmonary and nervous system, as these are related to the application of physiotherapy in patients.

COURSE LEARNING OUTCOMES: The student will be able to –

1. Describe anatomical aspects of muscles, bones, joints, their attachments of thorax and upper quadrant and to understand and discuss analysis of movements with respect to bones, joints and soft tissues related to musculoskeletal system of thorax & upper extremity.

2. Describe structures of the cardio-vascular & respiratory system, mechanism of respiration and the course of blood vessels, structure of rib cage & its contents with special emphasis to lungs, tracheo-bronchial tree, respiratory muscles & heart.

3. Describe source & course of major arterial, venous & lymphatic system, related to upper quadrant, thorax and heart.

4. Describe various structures of the genito-urinary system, abdomen, pelvic organs and sense organs and apply knowledge to living anatomy

5. Describe anatomy of lower quadrant including spine, pelvis and lower extremities: list bones, joints, soft tissues, muscles related to musculoskeletal system of spine & lower extremities and to localize various surface land-marks, apply related radiological and living anatomy

6. Describe anatomy of structures of head, face and neck

7. Describe and outline various parts of nervous system: Source, course & components of various trans-sections of spinal tracts and C.N.S; Source, course & components of various Tran'ssections of brain, cranial nerves (Special emphasis to III, IV, V, VI and VII) and peripheral nerves.

8. Describe blood circulation of C.N.S. & spinal cord.

9. Describe the course of peripheral nerves.

10. Discuss anatomical basis of clinical conditions of nervous system.

11. Demonstrate movements of lower extremity joints – Identify & describe the origin/insertion, nerve /blood supply, root value & function of various skeletal muscles (including lower extremity and spine).

PRACTICAL

COURSE OBJECTIVES - It is designed to provide students with the working knowledge of the structure of the human body which is essential foundation for their clinical studies.

COURSE LEARNING OUTCOMES: The student will be able to-

1. Describe anatomical aspects of muscles, bones, joints, their attachments of thorax and upper quadrant & to understand and discuss analysis of movements with respect to bones, joints and soft tissues related to musculoskeletal system of thorax, & upper extremity.

2. Describe structures of the cardio vascular & respiratory system, mechanism of respiration and the course of blood vessels, structure of rib cage & its contents with special emphasis to lungs, tracheo-bronchial tree, respiratory muscles & heart.

3. Describe source & course of major arterial, venous & lymphatic system, related to upper quadrant, thorax and heart.

4. Describe various structures of the genito-urinary system, abdomen, pelvic organs and

5. sense organs and apply knowledge to living anatomy

6. Identify and list bones, joints, soft tissues, muscles related to musculoskeletal system of spine & lower extremities and to localize various surface land-marks, apply related radiological and living anatomy

7. Identify structures of head, face and neck

8. Identify source, course & components of various trans-sections of spinal tracts and C.N.S; Source, course & components of various trans-sections of brain, cranial nerves (Special emphasis to III, IV, V, VI & VII) & peripheral nerves.

9. Demonstrate movements of upper extremity joints – Identify & describe the origin/insertion, nerve /blood supply, root value & function of various skeletal muscles, course of peripheral nerves. 10. Demonstrate movements of lower extremity joints – Identify & describe the origin/insertion, nerve /blood supply, root value & function of various skeletal muscles (including lower extremity and spine), course of peripheral nerves

PHYSIOLOGY (BPT 102)

THEORY

COURSE OBJECTIVES: The course in Physiology is designed to give the student an in-depth knowledge of fundamental reactions of living organisms, particularly in the human body. The major topics covered include the following: the cell; primary tissue; connective tissue; skin; muscle; nervous tissue; blood; lymphoid tissues; respiration; blood vessels; circulation; cardiac cycle; systemic circulation; gastrointestinal tract; kidneys; uterus; urinary tract; pregnancy; endocrine system.

COURSE LEARNING OUTCOMES: The student will be able to-

1. Describe physiology of blood.

2. Discuss nerve-muscle physiology.

3. Define and describe physiological functions of cardio vascular and respiratory system.

4. Define and describe physiological functions of Digestive system.

5. Define and describe physiological functions of Endocrine system.

6. Describe physiology of special senses.

7. Discuss Exercise physiology.

8. Define and describe physiological functions of Nervous system. .

9. Define and describe physiological functions of renal system.

10. Define and describe physiological functions of Reproductive system.

▪ Muscles- classification, structure, properties, Excitation contraction coupling

▪ Motor unit, EMG, factors affecting muscle tension,

▪ Muscle tone, fatigue, exercise

▪ Nerve –structure and function of neurons, classification, properties

▪ Resting membrane potential & Action potential their ionic basis

▪ All or None phenomenon

▪ Neuromuscular transmission

PRACTICAL

COURSE OBJECTIVES: The course in Physiology is designed to give the student an in-depth knowledge of fundamental reactions of living organisms, particularly in the human body.

COURSE LEARNING OUTCOMES: At the end of the course, the candidate will be able to

1. Demonstrate procedures to determine hematology findings.

2. Recognize the abnormalities in the hematology findings.

3. Demonstrate procedures to determine pulses and blood pressure.

4. Demonstrate procedures to examine sensory system & motor system

5. Demonstrate procedures to examine respiratory system & cardio vascular system.

CLINICAL BIOCHEMISTRY (BPT 103)

THEORY

COURSE OBJECTIVES: This course provides the knowledge and skills in fundamental organic chemistry and introductory biochemistry that are essential for further studies It covers basic biochemical, cellular, biological and microbiological processes, basic chemical reactions in the prokaryotic and eukaryotic cells, the structure of biological molecules, introduction to the nutrients i.e. carbohydrates, fats, enzymes, nucleic acids and amino acids

COURSE LEARNING OUTCOMES: At the end of the course, the candidate will able to –

1. Describe structures & functions of cell in brief.

2. Describe biochemistry of connective tissues.

3. Discuss acid base balance.

4. Define nutrition, balance diet & nutritional disorders.

5. Describe Nucleotide and Nucleic acid Chemistry

6. Discuss role of enzymes.

7. Describe Carbohydrate Chemistry, Amino-acid Chemistry & Vitamins.

8. Discuss Carbohydrate Metabolism, Lipid Metabolism, Amino acid and Protein Metabolism.

GENERAL PSYCHOLOGY (BPT 104)

THEORY

COURSE OBJECTIVES-Human Psychology involves the study of various behavioral patterns of individuals, theories of development, normal and abnormal aspects of motor, social, emotional and language development, communication and interaction skills appropriate to various age groups. The study of these subjects will help the student to understand their clients while assessment and while planning appropriate treatment methods.

COURSE LEARNING OUTCOMES: At the end of the course, the candidate will able to:

1. Define psychology of attention, perception and motivation.

2. Describe causes and management of frustration and conflict.

3. Discuss about intelligence, thinking and learning.

4. Describe personality and methods to assess personality.

5. Classify and describe social psychology and clinical psychology.

6. List importance of psychology in physiotherapy management of patients

BASIC NURSING AND FIRST AID (BPT 105)

THEORY

COURSE OBJECTIVES: Biomechanics involves the study of basic concepts of human movement, and application of various biomechanical principles in the evaluation and treatment of disorders of musculoskeletal system. Students are taught to understand the various quantitative and qualitative methods of movement. Mechanical principles of various treatment methods are studied. Study of posture and gait are also included.

COURSE LEARNING OUTCOMES: At the end of the course student will be able to:

1. Define and describe basic concepts in Biomechanics.

2. Classify joints and describe joint structures & its functions.

3. Discuss biomechanics of movements at joints related to planes and axis.

4. Classify muscle and describe muscle structures & its functions.

5. Discuss biomechanics of muscle related to force production.

6. Describe Biomechanics of the Thorax and Chest wall.

7. Describe Biomechanics of The Temporo mandibular Joint.

8. Describe Biomechanics of vertebral column.

FUNDAMENTAL OF YOGA (BPT 106)

THEORY

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences
2. Describe the yoga various postures
3. Demonstrate the yoga postures
4. Apply yoga techniques for clinical condition

PRACTICAL

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences
2. Describe the yoga various postures
3. Demonstrate the yoga postures
4. Apply yoga techniques for clinical condition

BACHELOR OF PHYSIOTHERAPY 2 YEAR

BIOMECHANICS AND KINESIOLOGY (BPT 201)

COURSE OBJECTIVES: This course supplements the knowledge of anatomy and enables the student to have a better understanding of the principles of biomechanics and their application in musculoskeletal dysfunction.

COURSE LEARNING OUTCOMES: At the end of the course student will be able to:

1. Describe Biomechanics of the shoulder complex.
2. Describe Biomechanics of the elbow Joint.
3. Describe Biomechanics of wrist joint and hand complex.
4. Describe Biomechanics of the hip Joint.

5. Describe Biomechanics of the knee and ankle complex.

6. Define and discuss biomechanical analysis of human gait.

7. Define and discuss biomechanical analysis of human posture

PRACTICAL COURSE OBJECTIVES: This course supplements the knowledge of anatomy and enables the student to have a better understanding of the principles of biomechanics and their application in musculoskeletal dysfunction.

COURSE LEARNING OUTCOMES: At the end of the course student will be able to:

1. Demonstrate movements of joints in all planes of movement. .

2. Identify missing component of movement.

3. Analysis posture and recognize presence of abnormality.

4. Analysis gait and recognize presence of abnormality.

5. Analysis activities of daily living and interpret the findings in functional activities.

EXERCISE THERAPY 1 (BPT 202)

Theory

COURSE OBJECTIVES - In this course, the students will learn the principles and effects of exercise as a therapeutic modality and will learn the techniques in the restoration of physical functions.

COURSE LEARNING OUTCOMES: At the end of the course, the candidate will able to:

1. Define principle of exercise applications.

2. Describe methods of testing – goniometry, manual muscle testing

3. Anthropometric Measurements, Measurement of Limb Length and functional tests.

4. Classify and describe active movements and passive movements.

5. Define and describe free exercises and resisted exercises.

6. Describe relaxation techniques.

7. Define and describe therapeutic massage.

Practical COURSE OBJECTIVES - In this course, the students will learn the principles and effects of exercise as a therapeutic modality and will learn the techniques in the restoration of physical functions.

COURSE LEARNING OUTCOMES: At the end of the course student will be able to:

1. Demonstrate passive movements in terms of various Anatomical planes.

2. Demonstrate various starting and derived positions.

3. Acquire a skill of assessment of sensations, superficial and deep reflexes,

4. Pulse rate/ Blood pressure, Chest expansion/ respiratory rate, and 5. Limb length/ girth measurement on Models.

6. Demonstrate the skills of relaxation.

7. Demonstrate the skill of measuring ROM with goniometer.

8. Demonstrate techniques of Massage Therapy & Soft Tissue Manipulations

ELECTROTHERAPY 1 (BPT 203)

Theory

COURSE OBJECTIVES - In this course the student will learn the Principles, Techniques and Effects, Indication, Contra-Indication and the dosage parameter for various indications of electro therapeutic modalities in the restoration of physical function. The objective of this course is that after 240hrs of lectures, demonstration, practical and clinics the student will be able to list the indications, contra indications, dosages of electro therapy modalities, demonstrates the different techniques, and describe their effects on various conditions.

COURSE LEARNING OUTCOMES: At end of course candidate will be able to:

1. Describe the types of currents

2. Describe the electro diagnosis.

3. Describe the about modalities of heat

4. Describe the application of electrotherapy

PRACTICAL

COURSE OBJECTIVE: The student of Electrotherapy must be able to demonstrate the use of electrotherapy modalities applying the principles of electrotherapy with proper techniques, choice of dosage parameters and safety precautions**.**

COURSE LEARNING OUTCOMES: At the end of this course candidate able to:

1. Demonstrate electrical stimulation

2. Demonstrate SWD & UST application

3. Demonstrate superficial heat modalities

4. Demonstrate checking of electrical equipments.

MEDICAL MICROBIOLOGY (204)

THEORY

COURSE OBJECTIVES: Students will develop an understanding of pathology underlying clinical disease states and involving the major organ systems and epidemiological issues. Epidemiological issues will be presented and discussed. Students will learn to recognize pathology signs and symptoms considered red flags for serious disease. Students will use problem-solving skills and information about pathology to decide when referral to another health care provider or alternative intervention is indicated. Students will develop the ability to disseminate pertinent information and findings, and ascertain the appropriate steps to follow.

COURSE LEARNING OUTCOMES: At the end of the course student will be able to:

1. Define infection, routes of infection and spread.

2. Describe Sterilization, disinfection and universal precautions in relation to infection.

3. Discuss basic principles of immunity.

4. Describe general properties of bacteria and bacteriology.

5. Describe general properties of viruses and virology.

6. Describe general properties of fungi and mycology.

7. Discuss clinical microbiology

PATHOLOGY (BPT 205)

THEORY

COURSE OBJECTIVES: This subject follows the basic subjects of Anatomy, Physiology and Biochemistry and it forms a vital link between preclinical subjects and clinical subjects. Pathology involves the study of causes and mechanisms of diseases. Microbiology involves the study of common organisms causing diseases including nosocomial infections and precautionary measures to protect one from acquiring infections. The knowledge and understanding of Microbiology & Pathology of diseases is essential to institute appropriate treatment or suggest preventive measures to the patient. Particular effort is made in this course to avoid burdening the student.

COURSE LEARNING OUTCOMES: At the end of the course, the candidate will able to:

1. Define cell injuries.

2. Describe inflammation and wound healing.

3. Discuss about immuno pathology.

4. Describe pathology of infectious diseases.

5. Describe Growth Disturbances and Neoplasia.

6. Explain pathology of Nutritional Disorders and genetic disorders.

7. Describe the pathology of various systems of human body

PHARMACOLOGY (BPT 206)

THEORY

COURSE OBJECTIVES - This course introduces the student to basic pharmacology of common drugs used, their importance in the overall treatment including Physiotherapy. The student after completing the course will be able to understand the general principles of drug action and the handling of drugs by the body. The student will be aware of the contribution of both drug and physiotherapy factors in the outcome of treatment.

COURSE LEARNING OUTCOMES: At the end of the course student will be able to:

1. Describe Pharmacological effects of commonly used drugs by patients referred for Physiotherapy, list their adverse reactions, precautions to be taken & contraindications, Formulation& route of administration.

2. Identify whether the pharmacological effect of the drug interferes with the Therapeutic response of Physiotherapy & vice-versa.

3. Indicate the use of analgesics & anti-inflammatory agents with movement disorders with consideration of cost, efficiency & safety for individual needs. Get the awareness of other essential &commonly used drugs by patients-The bases for their use & common as well as serious adverse reactions

PRINCIPLES OF YOGA (BPT 207)

THEORY

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences

2. Describe the yoga various postures

3. Demonstrate the yoga postures

4. Apply yoga techniques for clinical condition

PRACTICAL

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences

2. Describe the yoga various postures

3. Demonstrate the yoga postures

4. Apply yoga techniques for clinical condition

BACHELOR OF PHYSIOTHERAPY III YEAR

EXERCISE THERAPY-II (BPT 301)

THEORY

COURSE OBJECTIVES- After the course on exercise therapy student will be able to understand the different types of exercise for the benefit of patient in different situations and conditions both in health and disease or disorder.

COURSE LEARNING OUTCOMES: At the end of the course, the candidate will able to:

1. Define principle of Proprioceptive Neuromuscular Facilitation (PNF) and describe patterns, techniques of PNF.

2. Classify types of suspension and Describe methods of applying it.

3. Describe functional reeducation.

4. Define and describe Aerobic exercises.

5. Describe stretching techniques and classify the types of stretching.

6. Define principle of hydrotherapy and describe its various applications.

7. Describe mobilization of peripheral joints.

8. Discuss balance& coordination exercises.

9. Describe different walking aids and its uses.

PRACTICAL COURSE OBJECTIVES- After the course on exercise therapy student will be able to understand the different types of exercise for the benefit of patient in different situations and conditions both in health and disease or disorder.

COURSE LEARNING OUTCOMES: At the end of this course candidate able to:

1. Demonstrate PNF techniques.

2. Demonstrate Suspension therapy

3. Demonstrate mobilization of peripheral joints.

4. Demonstrate balance and coordination exercises.

5. Demonstrate usage of walking aids.

6. Demonstrate various techniques of stretching

ELECTROTHERAPY-II (BPT 302)

THEORY

COURSE OBJECTIVES - In this course the student will learn the Principles, Techniques and Effects, Indication, Contra-Indication and the dosage parameter for various indications of electro therapeutic modalities in the restoration of physical function. The objective of this course is that after 240hrs of lectures, demonstration, practical and clinics the student will be able to list the indications, contra indications, dosages of electro therapy modalities, demonstrates the different techniques, and describe their effects on various conditions.

COURSE LEARNING OUTCOMES: At end of course candidate will be able to:

1. Describe the types of currents

2. Describe the electro diagnosis.

3. Describe the about modalities of heat

4. Describe the application of electrotherapy.

PRACTICAL

COURSE OBJECTIVE: The student of Electrotherapy must be able to demonstrate the use of electrotherapy modalities applying the principles of electrotherapy with proper techniques, choice of dosage parameters and safety precautions. COURSE LEARNING OUTCOMES: At the end of this course candidate able to:

1. Demonstrate electrical stimulation

2. Demonstrate SWD & UST application

3. Demonstrate superficial heat modalities

4. Demonstrate checking of electrical equipments

ORTHOPEDICS (BPT 303)

THEORY

COURSE OBJECTIVES: This subject follows the basic science subjects to provide the knowledge about musculoskeletal conditions the therapist would encounter in their practice. The objective of this course is that after completion of the lectures and discussion the student will be able to demonstrate an understanding of musculoskeletal conditions causing disability, list the etiology, clinical features and methods of investigations and management

COURSE LEARNING OUTCOMES: The student will be able to

1. Discuss the Patho-physiology, clinical manifestations and conservative/surgical management of various traumatic cases of the musculoskeletal conditions

2. Describe the skill of clinical examination and interpretation of the pre-operative cases and postoperative cases

3. Discuss the investigation used in musculoskeletal conditions.

4. Discuss Pathological/biochemical studies pertaining to musculoskeletal conditions.

5. Identify the radiological findings with the clinical findings

GENERAL MEDICINE INCLUDING PEDIATRICS AND PSYCHIATRY (BPT 304)

THEORY

COURSE OBJECTIVES: This subject follows the basic science subjects to provide the knowledge about relevant aspects of general medicine. The student will have a general understanding of the diseases the therapist would encounter in their practice. The objective of this course is that the student will be able to list the

etiology, pathology, clinical features and treatment methods for various medical conditions

COURSE LEARNING OUTCOMES: The student will be able to:

1 Describe Etiology, Pathophysiology, Signs & Symptoms & Management of the various Cardiovascular, Pulmonary, Gastro intestinal, Renal, Endocrinal, Metabolic, Geriatric & Nutrition Deficiency conditions

2 Describe Etiology, Pathophysiology, Signs & Symptoms, and Clinical Evaluation & Management of the various Psychiatry Conditions

3 Describe the principles of Management at the pediatrics condition

GENERAL SURGERY (BPT 305)

THEORY

COURSE OBJECTIVES: This subject follows the basic science subjects to provide the knowledge about relevant aspects of general surgery. The student will have a general understanding of the surgical conditions the therapist would encounter in their practice. The objective of this course is that after 60 hrs of lectures and discussion, the student will be able to list the indications for surgery, etiology, clinical features and surgical methods for various conditions.

COURSE LEARNING OUTCOMES: The student will be able to

1. Describe various surgical indications of abdominal, thoracic, neuro-surgical and peripheral vascular conditions

2. Describe surgical steps & Approaches in short and describe components of soft tissues

3. Recognize the post-operative complications and its implications in ward treatment, Prognosis, Morbidity and mortality

4. Describe effects of surgical trauma and anesthesia in post-operative course

5. Understand, classify, clinically assess, evaluate and describe surgical management in brief in: i. Wounds and ulcers ii. Burns iii. Head injuries

6. Identify and interpret findings of x-ray chest and abdomen, CT-Scan, USG

7. Describe the normal and abnormal physiological event during the puberty, pregnancy, labour, purpeuriun and pre, peri and post menopause.

COMMUNITY MEDICINE (BPT 306)

THEORY

COURSE OBJECTIVES: The subject serves to integrate the knowledge gained by the students in community medicine and other areas with skills to apply these in clinical situations of health and disease and its prevention. The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify rehabilitation methods to prevent disabilities and dysfunctions due to various disease conditions and plan and set treatment goals and apply the skills gained in rehabilitating and restoring functions

COURSE LEARNING OUTCOMES: The student will be able to

1. Describe the organizational set up of the healthcare delivery system of India

2. To apply these in clinical situations of health and disease and its prevention

3. To identify rehabilitation methods to prevent disabilities and dysfunctions due to various disease conditions

4. To plan and set treatment goals and apply the skills gained in rehabilitating and restoring functions

5. To do evaluation of disability and planning for prevention and rehabilitation

6. To plan Community Based Rehabilitation in urban and rural setup

7. To describe the normal and abnormal physiological events during the puberty, labor, puerperium, post–natal stage and menopause and their PT management

8. To discuss the various complications during pregnancy, labour, puerperium and post– natalstage, pre and post-menopausal stage and various aspects of urogenital dysfunction and their PT management in brief

9. To perform clinical examination of pelvic floor

10. To perform clinical examination of pregnant woman

11. To describe Physiology of aging process and its influence on physical fitness

12. To perform Role of physiotherapist in geriatric rehabilitation.

RESEARCH METHODOLOGY AND BIOSTATISTIC (BPT 307)

THEORY

PRACTICLE COURSE OBJECTIVES: The objective of this module is to help the students understand the basic principles of research and methods applied to draw inferences from the research findings. **COURSE LEARNING OUTCOMES**: The student will be able to

1. Describe the basic principles of research and methods applied to draw inferences from the research findings

2. Discuss the basic concepts of Biostatistics

3. Explain Design, Methodology of Experiment/Survey, Demography & vital statistics, Sampling & interpretation of Data

APPLICATION OF YOGA (BPT 308)

THEORY

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences

2. Describe the yoga various postures

3. Demonstrate the yoga postures

4Apply yoga techniques for clinical condition

PRACTICAL

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences

2. Describe the yoga various postures

3. Demonstrate the yoga postures

4. Apply yoga techniques for clinical condition

BACHELOR OF PHYSIOTHERAPY IV YEAR PHYSIOTHERAPY IN ORTHOPEDIC CONDITION (BPT 401)

THEORY

COURSE OBJECTIVES: The subject serves to integrate the knowledge gained by the students in musculoskeletal conditions and Traumatology with skills to apply these in clinical situations of dysfunction and musculoskeletal pathology. The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify disabilities due to musculoskeletal dysfunction, plan and set treatment goals and apply the skills gained in exercise therapy and electrotherapy in these clinical situations to restore musculoskeletal function COURSE **LEARNING OUTCOMES:** The students will be able to

1. Apply the knowledge gained in clinical musculoskeletal and sports conditions with Physiotherapy techniques

2. To identify disabilities due to musculoskeletal and sports dysfunction, plan and set treatment goals

3. Implement the physiotherapy treatment protocol for various musculoskeletal disorders and sports injuries

4. Prescribe appropriate Orthosis /splints & will be able to fabricate temporary protective & functional splints

5. Describe treatment protocol for various musculoskeletal and sports conditions.

PRACTICALS

COURSE OBJECTIVES: The objective of this module is to discuss the Patho-physiology, clinical manifestations and conservative/surgical management of various traumatic cases of the Musculo-skeletal conditions, skill of clinical examination and

interpretation of the preoperative cases and post-operative cases, investigation used in musculoskeletal conditions, Pathological/biochemical studies pertaining to musculoskeletal conditions with radiological findings.

COURSE LEARNING OUTCOMES: The student will be able to

1. Identify the musculoskeletal dysfunctions

2. Describe effective goals and treatment plan

3. Demonstrate the special test used to diagnose in various musculoskeletal condition

4. Implement and assess progression of treatment plan

5. Design the physiotherapy treatment for various musculoskeletal disorders

6. Demonstrate the various exercise techniques used in musculoskeletal disorders

PHYSIOTHERAPY IN NEUROLOGICAL CONITION (BPT 402)

THOERY

COURSE OBJECTIVES: -The subject serves to integrate the knowledge gained by the students in neurology and neurosurgery with skills to apply these in clinical situations of dysfunction and neurological pathology. The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify disabilities due to neurological dysfunction, plan and set treatment goals and apply the skills gained in exercise therapy and electrotherapy in these clinical situations to restore neurological function

COURSE LEARNING OUTCOMES: The student will be able to

1. Describe the assessment and physiotherapy management for neurology and neurosurgery

2. To identify disabilities due to neurological dysfunction, plan and set treatment goals

3. To apply the skills gained in exercise therapy and electrotherapy in these clinical situations to restore neurological function

4. Identify & analyze Neuro-motor & psychosomatic dysfunction

5. Implement the Advice & parents education in Neuro-pediatric care

6. Be able to prescribe appropriate Orthosis/splints & will be able to fabricate temporary protective & functional splints.

PRACTICAL

COURSE OBJECTIVES: The subject follows inheritance of imparting basic as well as advanced information in a wide range of Neurological disorders. The same shall augment and enhance ones abilities in treating and overall smooth and efficient handling in patients suffering with the most widely predominant as well as specific Neurological disorders

COURSE LEARNING OUTCOMES: The student will be able to

1. Demonstrate the neurological dysfunctions in both upper motor neuron and lower motor neuron diseases

2. Design the goals and treatment plan

3. Implement and assess progression of treatment plan

4. To apply theoretical knowledge of neurological physiotherapy in rehabilitation of neurological patients

PHYSIOTHERAPY IN CARDIO-RESPIRATORY AND GENERAL MEDICINE(BPT 403)

THEORY

COURSE OBJECTIVES: Following the basic science and clinical science course, this course introduces the Student in cardio-thoracic conditions which commonly cause disability. The objective of this course is that after lectures and demonstration in addition to clinics the student will be able to demonstrate an understanding of Cardio-pulmonary conditions causing disability and their management. Particular effort is made in this course to avoid burdening the student with any detail pertaining to diagnosis which will not contribute to their understanding of the limitations imposed by cardiovascular pathology on the functioning of the individual

COURSE LEARNING OBJECTIVES: The student will be able to

1. Discuss the Cardio-pulmonary conditions which commonly cause disability

2. Describe the Cardio-pulmonary conditions causing disability and their management

3. Interpret the investigation used in cardio respiratory conditions

PRACTICAL

COURSE OBJECTIVES: The course follows exercising in practical format in treating cardiovascular and pulmonary conditions at any setup installed existing at the rural to the most urbanized tertiary care with the modernist supporting equipments. An in-depth knowledge regarding basics and advances shall render promising treatment strategies

COURSE LEARNING OUTCOMES: The student will be able to–

1. Discuss the assessment of cardiac and respiratory systems for various General Medical and Surgical conditions

2. Explain the monitoring of the patient in regard to treatment

3. Discuss on monitor the patient’s vital signs

4. Identify the emergency drugs indication and contra-indication

5. Implement the appropriate interventions to the patient in Intensive Care Unit (ICU)

6. Design the physiotherapy interventions for cardiorespiratory conditions.

7. To demonstrate the cardiology physical assessment

8. To demonstrate the respiratory physical assessment

9. To demonstrate treatment schedule for cardio respiratory conditions.

10. To implement and assess progression of treatment plan

PHYSIOTHERAPY IN SPORTS (BPT 404)

THEORY

COURSE OBJECTIVES: The subject serves to integrate the knowledge gained by the students in sports conditions with skills to apply these in clinical situations of dysfunction and sports injuries. The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify disabilities due to sports related dysfunction, plan and set treatment goals and apply the skills gained in exercise therapy and electrotherapy in these clinical situations to restore musculoskeletal function

COURSE LEARNING OUTCOMES: The students will be able to

1. Apply the knowledge gained in clinical sports conditions with Physiotherapy techniques

2. To identify disabilities due to sports dysfunction, plan and set treatment goals

3. Implement the physiotherapy treatment protocol for various sports injuries

4. Prescribe appropriate Orthosis /splints & will be able to fabricate temporary protective & functional splints

5. Describe treatment protocol for various sports conditions.

PRACTICAL

COURSE OBJECTIVES: The objective of this module is to discuss the Patho-physiology, clinical manifestations and conservative/surgical management of various traumatic cases of the Musculo-skeletal conditions, skill of clinical examination and interpretation of the preoperative cases and post-operative cases, investigation used in musculoskeletal conditions, Pathological/biochemical studies pertaining to musculoskeletal conditions with radiological findings

COURSE LEARNING OUTCOMES: The student will be able to

1. Identify the musculoskeletal dysfunctions

2. Describe effective goals and treatment plan

3. Demonstrate the special test used to diagnose in various musculoskeletal condition

4. Implement and assess progression of treatment plan

5. Design the physiotherapy treatment for various musculoskeletal disorders

6. Demonstrate the various exercise techniques used in musculoskeletal disorder

REHABILITATION ON MEDICINE (BPT 405)

COURSE OBJECTIVES: The subject serves to integrate the knowledge gained by the students in General Medicine and Surgery with skills to apply these in clinical situations of dysfunction and musculoskeletal pathology. The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify conditions

COURSE LEARNING OUTCOMES: The student will be able to

1. Describe the organizational set up of the healthcare delivery system of India

2. To apply these in clinical situations of health and disease and its prevention

3. To identify rehabilitation methods to prevent disabilities and dysfunctions due to various disease conditions

4. To plan and set treatment goals and apply the skills gained in rehabilitating and restoring functions

5. To do evaluation of disability and planning for prevention and rehabilitation

6. To plan Community Based Rehabilitation in urban and rural setup

7. To describe the normal and abnormal physiological events during the puberty, labor, puerperium, post–natal stage and menopause and their PT management

8. To discuss the various complications during pregnancy, labour, puerperium and post– natalstage, pre and post-menopausal stage and various aspects of urogenital dysfunction and their PT management in brief

9. To perform clinical examination of pelvic floor

10. To perform clinical examination of pregnant woman

11. To describe Physiology of aging process and its influence on physical fitness

12. To perform Role of physiotherapist in geriatric rehabilitation

PRACTICAL

COURSE OBJECTIVES: The subject serves to integrate the practical knowledge gained by the students in General Medicine and Surgery with skills to apply these in clinical situations of dysfunction and pathology. The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify conditions.

Practical shall be conducted for all the relevant topics discussed in theory in the following forms:

1. Besides case presentations and case discussions

2. Lab session consist of evaluation and assessment methods on student models, treatment techniques and practice sessions.

THERAPEUTICS YOGA (BPT 406)

THEORY

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1. Describe the basics of yogic Sciences
2. . Describe the yoga various postures
3. . Demonstrate the yoga postures
4. . Apply yoga techniques for clinical condition

PRACTICAL

COURSE LEARNING OUTCOMES: By the end of the course the students able to:

1 Describe the basics of yogic Sciences

2 Describe the yoga various postures

3 Demonstrate the yoga postures

4. Apply yoga techniques for clinical condition