

Faculty of Physiotherapy

Program Outcomes (POs)



BACHELOR OF PHYSIOTHERAPY PROGRAM OUTCOMES

The aim of the course is to provide a comprehensive, training to the students that prepares them for providing a quality physiotherapy care to the patients so that at the end of the course he/she will be able to perform the following

- **PO1.** Demonstrate the knowledge, skills, and abilities required for independent, competent physical therapy practice.
- **PO2.** Practice in a manner consistent with established legal standards, professional behavior, and ethical guidelines.
- **PO3**. Acquire and demonstrate knowledge on Basic Medical sciences, Human Movement Sciences, Various Medical and Surgical Treatments to identify Psychological, Social, Economical, Cultural aspects of diseases and its impact on community.
- **PO 4.** Implement clinical practice that is safe, efficient, patient-centered, evidence-based and documented
- **PO5** Analyze and interpret physical assessment and diagnosis and set appropriate short and long term goals.
- **PO6**. Plan safe and effective use of therapeutic exercise incorporating decision making, goal setting and design of exercise program.
- **PO7**Communicate safely and effectively as a professional with patients, care givers and colleagues. Also communicate effectively across wide range of professional and personal contexts.
- **PO8**. Demonstrate ability to work independently or collaboratively as a part of rehabilitation team.
- **PO9**. Ability to understand and conduct research activities.
- **PO10**. Engage in activities that contribute to the betterment of society and behave ethically and responsible in social environment.
- **PO11**. Contribute to an advocate for the health and wellness of society through education, consultation, and community outreach.



Budhera, Guruqram-Badli Road, Guruqram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

MASTER OF PHYSIOTHERAPY PROGRAMME OUTCOMES

The aim of the course is to provide a comprehensive, training to the students that prepares them for providing a quality physiotherapy care to the patients so that at the end of the course he/she will be able to perform the following -

- **PO1**-Demonstrate a critical understanding of the theoretical knowledge, concepts and scientific basis of physiotherapy and by using relevant patient-centred clinical reasoning, assess the needs of an individual and develop, implement and evaluate appropriate intervention strategies to meet their n
- **PO2**-Acquire sufficient knowledge and skills so as to impart best of clinical care to the patients using patient centered and evidence based approach.
- **PO3-**Demonstrate research literacy by being able to evaluate in depth the available scientific literature associated with physiotherapy practice in order to ensure effective application of therapeutic strategies and evidence based healthcare provision and should be able to take independent research projects
- **PO4**-Develop and sustain a high standard of professional communication and interpersonal skills with clients, carers/families and members of a team based on core values of professional practice.
- **PO5**-Develop and sustain a high standard of professional communication and interpersonal skills with clients, carers/families and members of a team based on core values of professional practice.
- **PO6-**Work autonomously and effectively as a physiotherapist within the legal, ethical and cultural parameters of practice as well as in partnership with individuals, families, groups, communities and with other health and social care providers to enable issues which affect the health and wellbeing of clients to be addressed effectively through interprofessional approaches.
- **PO7-** Pursue higher studies like PhD in Physiotherapy
- **PO8-** Demonstrate digital and informative literacy by showing competency in the use of information technology as a medium of therapeutic assessment, intervention, evaluation and research.
- **PO9-**Acquire sufficient knowledge and skills to get him/her placed in their respective areas of specialization.



Program Specific Outcomes(PSOs)



MASTERS IN SPORTS PHYSIO THERAPY (MPT SPORTS) PROGRAMME SPECIFIC OUTCOMES

The aim of the course is to provide a comprehensive, training to the students that prepares them for providing a quality physiotherapy care to the patients so that at the end of the course he/she will be able to perform the following

- **PSO1.** Able to perform assessment of players sustaining sports related injuries.
- **PSO2.** Able to perform on field evaluation and basic knowledge of first aid which are the cornerstones of management of any sports injury.
- **PSO3.**Understand and demonstrate development of injury prevention program for the sports playing population.
- **PSO4.**Understanding and development of individual diet and nutrition program for the sports population.
- **PSO5.** Understand teach and monitor sports specific mechanics and correct abnormal mechanics.
- **PSO6.** Able to Prevent and minimizing various risk factors of sports injuries.
- **PSO7.** Able to perform pre-participation evaluation and correct risk factors before main event.
- **PSO8.** Able to work out proper fitness regimen and rehabilitation protocol for various sports injuries.



Budhera, Gurugram-Badli Road, Gurugram (Harvana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

MPT NEURO PHYSIOTHERAPY

PROGRAMME SPECIFIC OUTCOME

The aim of the course is to provide a comprehensive, training to the students that prepares them for providing a quality physiotherapy care to the patients so that at the end of the course he/she will be able to perform the following

- **PSO1.**Understand the principles and skills underlying the recognition and management of the neurologic diseases.
- **PSO2.**Provide an educational program that helps prepare our students so that they may choose it as part of the general professional education.
- **PSO3.** Acquisition of the clinical application of basic knowledge of the nervous system.
- **PSO4.**Development of communication skills that will facilitate the clinical interaction with patients with neurologic disorders and their families and thus ensure that complete, accurate data are obtained.
- **PSO5.** Development of competency in the single system neurological examination.
- **PSO6.** Acquisition of the knowledge necessary for the diagnosis and initial management of common acute and chronic neurological conditions.
- **PSO7.** Development of clinical problem-solving skills.
- **PSO8.** An understanding of the influence of family, community, and society in the care of people with neurological
- **PSO9.** Development of strategies for health promotion and prevention of neurological damage.
- **PSO10.** Development of the attitudes and professional behaviors appropriate for clinical practice.
- **PSO11.** Able to understand approach of neurologists to the health care of people with neurologic conditions.



MPT ORTHOPEDICS PHYSIOTHERAPY

PROGRAMME SPECIFIC OUTCOME

The aim of the course is to provide a comprehensive, training to the students that prepares them for providing a quality physiotherapy care to the patients so that at the end of the course he/she will be able to perform the following

- **PSO1.**Knowledge and understanding of subject will help the student in planning assessment and diagnosis of the patient with help of various concepts like knowledge of clinical reasoning, screening patients based on special tests and help them in planning a better rehabilitation of the patient.
- **PSO2.** Able to correlate the clinical manifestation to the dysfunction of the Orthopaedic conditions.
- **PSO3.** Able to form base of professional practice with the evidence based practice and enables the student to have a better understanding of the subject.
- **PSO4.** Able to prevent various Musculoskeletal injuries and plan a rehabilitation protocol.
- **PSO5.**Begin to understand an educational plan for continuous learning throughout the professional career.
- **PSO6.** Able to adopt understanding, teaching and monitor various Orthopedic conditions and ergonomics in various musculoskeletal injuries.



MASTERS IN CARDIOPULMONARY PHYSIOTHERAPY

PROGRAMME SPECIFIC OUTCOMES

- **PSO1.**Interpretation of different invasive and non invasive diagnostic investigation to make proper assessment in various respiratory and cardiovascular dysfunction
- **PSO2.** Develops the skills to execute different Physiotherapy techniques used in treatment of Cardio-respiratory dysfunctions.
- **PSO3.**Demonstrate abilities to select strategies for cure, care & prevention; adopt restorative & rehabilitative measures for maximum possible functional independence of a patient at home, work place & in community
- **PSO4.** Able to execute the effective Physiotherapeutic measures with appropriate clinical reasoning to improve pulmonary function.
- **PSO5.** Able to design & execute effective tailored cardiopulmonary rehabilitation programme.
- **PSO6.** Able to execute the principle of care of patients at the Intensive care area.



Course Outcomes (COs)



(UGC Approved) Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) - 122505 Ph.: 0124-2278183, 2278184, 2278185

BPT COURSE STRUCTURE AND OUTCOMES

Semester -I

| Name of Department: | Physiotherapy | |
|-----------------------------|-------------------------|---|
| Course Name: | Anatomy-1 | |
| Course code: 0306010 | 1 | |
| Course Outcomes: | | |
| CO1. To understand t | he basics terminology a | nd various anatomical structures of the body. |

- CO2. To understand the bones, joints, muscles, vascular and nerve supply of upper limb.
- CO3. To understand the various parts of brain and spinal cord with its pathways and vascularity of brain.
- **CO4.** To understand the bones, joints, muscles, vascular and nerve supply of head and neck.
- CO5. To understand the routes and functions Cranial nerves.

| Name of Department: | Physiotherapy | | |
|--|---|----------------------|--|
| Course Name: | Physiology-1 | | |
| Course code: 03060102 | 2 | | |
| Course Outcomes: | | | |
| CO1. To understand the basic function of Cell and its morphology. | | | |
| CO2. To understand to | the basic function and co | omposition of Blood. | |
| CO3. To understand to | CO3. To understand the basic physiology of Respiratory system. | | |
| CO4. To understand to | D4. To understand the basic physiology of digestive system. | | |
| CO5. To understand to | To understand the basic physiology of Muscular system and its contraction mechanism | | |

| Name of Department: | Physiotherapy | |
|---------------------------|-----------------------------|--|
| Course Name: | Biochemistry-1 | |
| Course code: 0306010 | 3 | |
| Course Outcomes: | | |
| CO1. To understand | biochemical basis of life | sciences |
| CO2. To understand | the metabolism, function | n and mechanism of action of various elements of |
| the body. | | |
| CO3. To understand t | he transport system of elec | tron and its effects on body. |

| Name of Department: | Physiotherapy | |
|-----------------------|------------------|--|
| Course Name: | Electrotherapy-1 | |
| Course code: 03060104 | | |
| Course Outcomes: | | |

- **CO1.** To have an overview of electrical supply in the Physiotherapy department
- CO2. Able to demonstrate the techniques of application of Heat and Cold for the therapeutic purposes.
- CO3. Able to demonstrate the techniques of application of different types of radiations for the therapeutic purposes
- **CO4.** Able to select the appropriate dosages of different electromagnetic radiations to achieve the desired goals.



SGT UNIVERSITY SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved) Gurugram, Delhi-NCR

Name of Department: Physiotherapy

Course Name: Sociology

Course code: 03060105

- Course Outcomes: **CO1.** Understand the role of family and community in the development of behaviours.
- **CO2.** Develop a holistic outlook toward the structure of society and community resources.
- **CO3.** Identify the subtle influence of culture in the development of human personality, the role of beliefs and values as determinants of individual and group behaviours.
- **CO4.** Understand the social and economical aspects of community that influence the health of the people.
- CO5. Learn to assess the social problems and participate in social planning.
- **CO6.** Identify social institutions and resources.
- **CO7.** Understand the significance of social interactions in the process of rehabilitation.
- **CO8.** Appreciate the role of therapist as a member of society and the interdependence between individuals and society

| Name of Department: | Physiotherapy | |
|--|------------------------|--|
| Course Name: | Basic Computer | |
| Course code: 03060106 | | |
| Course Outcomes: | | |
| CO1. At the end of the session students would be able understand the basic operation of | | |
| computer and creating | the documents, power p | oint presentation and making spreadsheets in |
| Excel along with the fo | rmulas. | |

| Name of Department: Physiotherapy | | |
|-----------------------------------|-----------------------------|--|
| Course Name: | English | |
| Course code: 03060107 | | |
| Course Outcomes: | | |
| CO1. Develop listening skills | | |
| CO2. Develop w | CO2. Develop writing skills | |

| 1. Name of Department: Physiotherapy | | | | |
|--|----------------------------|--------------------|-------------------|------|
| 2. Course Name: | Positive Psychology | L:2 | T: | P: 2 |
| | & Mindfulness | | | |
| 3. Course code: FBSV | A01 | | | |
| 8. Course Outcomes: | | | | |
| CO1. Underst | 1 1 2 23 | | | |
| CO2. Knowledge abou | at the Concept of intellig | gence, Motivation, | frustration, Defe | ense |
| mechanism of E | go | | | |
| CO3. Understand the Psychological concept related to school methods and branches. | | | | |

CO4. Knowledge about the psychological reaction of patient and reaction to loss.



Budhera, Guruqram-Badli Road, Guruqram (Haryana) - 122505 Ph.: 0124-2278183, 2278184, 2278185

Semester -II

| Name of Department: | Physiotherapy | |
|-----------------------|---------------|--|
| Course Name: | Anatomy-II | |
| Course code: 03060201 | | |
| Course Outcomes: | | |

CO1. To understand the various parts and surfaces of Heart, Lungs and viscera.

CO2. To understand the bones, joints, muscles, vascular and nerve supply of lower limb.

CO3.To understand the various parts of bones and joints of thorax, intercostal muscles, movements of thorax.

CO4. To understand the various parts and surfaces of stomach, GIT, pancreas and liver.

CO5. To understand various anatomical parts of reproductive system.

Name of Departments Dhysiotherens

| Name of Department: | Physiotherapy | |
|--|----------------------------|--|
| Course Name: | Physiology-II | |
| Course code: 03060202 | | |
| Course Outcomes: | | |
| CO1. To understand the | he basic physiology of A | Autonomic Nervous System. |
| CO2. To understand the | he basic physiology of (| Cardio Vascular System. |
| CO3. To understand the | he basic physiology of I | Nervous System. |
| CO4. To understand the basic physiology of GIT and reproductive system. | | |
| CO5. To understand the | he basic function and co | omposition of Skin. |
| CO6. To understand the | e normal physiological alt | eration on Altitude, space and underwater. |

| Name of Department: | Physiotherapy | |
|---|------------------------|--|
| Course Name: | Biochemistry-II | |
| Course code: 0306020 | 3 | |
| Course Outcomes: | | |
| CO1. To understand the metabolism, function and mechanism of action of various elements of the body | | |
| like minerals, vitan | nins and nucleic acid. | |
| CO2. To understand the role of nutrition on body with biochemical changes. | | |
| CO3. To understand the biochemical changes in connective tissues, muscles and nerves. | | |
| CO4. To understand the biochemical markers for diagnosis of various disease conditions | | |

| Name of Department: | Physiotherapy | | | |
|--|-----------------------|--|--|--|
| Course Name: | Electrotherapy-II | | | |
| Course code: 03060204 | Course code: 03060204 | | | |
| Course Outcomes: | | | | |
| CO1. Able to demonstrate the techniques of application of various electrotherapy modalities. | | | | |
| CO2. Able to select the appropriate modalities in different conditions | | | | |
| CO3. Able to select the appropriate dosages of different Electrotherapy modalities to achieve the | | | | |
| different goals | | | | |

| Name of Department: | Physiotherapy | |
|---------------------|---------------|--|
| Course Name: | Psychology | |



Budhera, Guruqram-Badli Road, Guruqram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

Course code: 03060205

Course Outcomes:

CO1. Psychosocial assessment of patients in various developmental stages.

CO2. Concept of stress and its relationship to health, sickness and one's profession.

CO3. Ego defense mechanisms and learn counselling techniques to help those in need.

CO4. Reasons for non-compliance among patients and improving compliance behaviour

| Name of Department: | Physiotherapy | | |
|--|------------------|--|--|
| Course Name: | Applied Computer | | |
| Course code: 03060206 | | | |
| Course Outcomes: | | | |
| CO1 . After completing the course students would be able to describe the software's and be able | | | |
| to create the webpages | | | |

| Name of Department: Physiotherapy | | | |
|--------------------------------------|---------|--|--|
| Course Name: | English | | |
| Course code: 03060207 | | | |
| Course Outcomes: | | | |
| CO1. Able to communicate effectively | | | |
| CO2. Development of personality | | | |

| Name of Department: Physiotherapy | | |
|---|----------------|--|
| Course Name: | Basics of Yoga | |
| | Therapy | |
| Course code: 03060209 | | |
| Course Outcomes: | | |
| CO1. The student will be able to demonstrate different Asanas correctly | | |
| CO2. The students will be able to demonstrate various techniques of Pranayamas, Bandhas and | | |
| Mudras | | |



Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

Semester-III

| Name of Department: | Physiotherapy | |
|-----------------------|---------------|--|
| Course Name: | Pathology | |
| Course code: 03060301 | | |
| Course Outcomes: | | |

At the end of the course, the student will be able to

- **CO1.** Acquire the knowledge of concepts of cell injury and changes Produced thereby in different tissues and organs; Capacity of the body in healing Process.
- **CO2.**Recall the Etio-pathological effects and the Clinical pathological Correlation of common infection and noninfectious diseases.
- **CO3.** Acquire the knowledge of concepts of Neoplasia with reference to the Etiology, gross and microscopic features diagnosis and prognosis in different tissues and organs of the body.
- **CO4.**Correlate normal and altered morphology of different organ systems in different diseases needed for understanding disease process and their clinical significance (with special emphasis on neuro-musculoskeletal and cardio-respiratory system).
- **CO5.** Acquire knowledge of common immunological disorders and their resultant effects on the human body.
- **CO6.** Understand in brief, about the Hematological diseases and their resultant effects on the human body

| Name of Department: Physiotherapy | | |
|-----------------------------------|--------------|--|
| Course Name: | Microbiology | |
| Course code: 03060301 | | |
| α ο . | | |

Course Outcomes:

- **CO1.** Acquire the knowledge of concepts of cell injury and changes Produced thereby in different tissues and organs; Capacity of the body in healing Process.
- **CO2.**Recall the Etio-pathological effects and the Clinicopathological Correlation of common infection and noninfectious diseases.
- **CO3.** Acquire the knowledge of concepts of Neoplasia with reference to the Etiology, gross and microscopic features diagnosis and prognosis in different tissues and organs of the body.
- **CO4.**Correlate normal and altered .morphology of different organ systems in different diseases needed for understanding disease process and their clinical significance (with special emphasis on neuro-musculoskeletal and cardio-respiratory system).
- **CO5.** Acquire knowledge of common immunological disorders and their resultant effects on the human body.
- **CO6.** Understand in brief, about the Hematological diseases and their resultant effects on the human body.
- **CO7.** Only brief descriptions of the following topics are necessary so that the student get a general idea of the fundamental aspects of the topics elaborate descriptions are to be avoided



SGT UNIVERSITY SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved)
Gurugram, Delhi-NCR
Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

Name of Department: Physiotherapy

Course Name: Biomechanics-I

Course code: 03060302

Course Outcomes:

- **CO1.** Able to describe the understanding of basics of mechanics, muscle structure and contraction, factors effecting muscle contraction and recruitment,
- **CO2.** Explain mechanics of chest wall during various movements and the patho-mechanics associated with various chest conditions and deformities.
- CO3. Understand normal mechanics and patho mechanics of TMJ associated with various conditions.
- **CO4.** Analyze normal mechanics of posture and gait in various planes and axis and patho mechanics associated with abnormal posture and gait.

| 1. Name of Department: | Physiotherapy | |
|--------------------------|--------------------|--|
| 2. Course Name: | Exercise Therapy-I | |
| 3. Course code: 03060303 | | |
| | | |

- Course Outcomes:
- **CO1**. Understand the basics of mechanics involved in exercise therapy
- CO2. Describe and demonstrate fundamental and derived positions,
- CO3. Describe ribs and demonstrate active, passive, resisted movements, and
- **CO4.** Describe the skills involved in benefits of various equipments used in therapeutic gymasium,
- **CO5.** Describe relaxation techniques and positions and able to perform various assessment technique
- **CO6.** Patient assessment and examination like goniometry and Manual muscle testing.

| Name of Department: | Physiotherapy | |
|-----------------------|---------------------|--|
| Course Name: | Physical Assessment | |
| Course code: 03060304 | | |
| Course Outcomes: | | |

- **CO1.**To understand the basics of Electro diagnosis used in Physiotherapy, viz. EMG, SD Curve, and NCV.
- **CO2.** To understand the assessment and evaluation of all joints of the human body.
- **CO3.** To understand the assessment of Cardio Pulmonary dysfunction.
- **CO4.** To understand the assessment of pain with its documentation.
- CO5. To understand the full assessment of Hand.

| Name of Department: Physiotherapy | | |
|--|------------------------|--|
| Course Name: | Environmental Sciences | |
| Course code: 03060305 | | |
| Course Outcomes: | | |
| At the end of the course, the student will be able to understand the | | |



Budhera, Guruqram-Badli Road, Guruqram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

CO1. The multidisciplinary nature of environmental studies

CO2. Natural Resources Renewable and non-renewable resources

CO3. Ecosystems, Biodiversity and its conservation

CO4. Social Issues and the Environment

CO5. Human Population and the Environment

| Name of Department: Physiotherapy | | |
|---|------------------|--|
| Course Name: | Physical Fitness | |
| Course code: 03060308 | | |
| Course Outcomes: | | |
| CO1. Assessment of physical fitness of the population in the society. | | |

CO2. Implement awareness program regarding the importance of fitness and physical activities in prevention of various disease.



. Budhera, Guruqram-Badli Road, Guruqram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Semester -IV

| Name of Department: | artment: Physiotherapy | | |
|-----------------------|------------------------|--|--|
| Course Name: | Pharmacology | | |
| Course code: 03060401 | | | |
| Course Outcomes: | | | |

- **CO1.**To understand the various routes of drugs administration, pharmacodynamics and pharmacokinetics of drugs.
- **CO2.** To understand the various drugs used for the treatment of ANS, PNS and CNS conditions with their mechanism of action and adverse effects.
- **CO3.**To understand the various drugs used for the treatment of endocrine system with their mechanism of action and adverse effects.
- **CO4.**To understand the various drugs used for the treatment of GIT problems with their mechanism of action and adverse effects.
- **CO5.**To understand the various antibiotic drugs with their mechanism of action and adverse effects.
- **CO6.** To understand the various drugs used for the treatment of ailment of cardio vascular system with their mechanism of action and adverse effects.
- **CO7.**To understand the various drugs used for the treatment of Bronchial Asthma, Skin lesions and heavy metal poisoning.
- **CO8.** To understand the protocol of immunization, drugs banned in sports and role of Vitamins.

| Name of Department: | Physiotherapy | | | |
|--|-----------------|--|--|--|
| Course Name: | Biomechanics-II | | | |
| | | | | |
| Course code: 03060402 | | | | |
| Course Outcomes: | | | | |
| CO1. Able to describe the mechanics of shoulder, elbow, wrist, hip, knee and ankle and foot | | | | |
| CO2. Understand normal mechanics and patho mechanics of different conditions. | | | | |
| CO3 Normal mechanics of spine and patho mechanics in abnormal posture | | | | |

| | 1. Name of Department: Physiotherapy | | |
|---|--------------------------------------|--|--|
| | 2. Course Name: Exercise Therapy-II | | |
| | 3. Course code: 03060403 | | |
| ſ | & Course Outcomes | | |

- 8. Course Outcomes:
- **CO1**. Able to describe the basics of neuromuscular co- ordination involved in exercise therapy,
- CO2. Describe and demonstrate functional reeducation, bicsexercises,
- **CO3.** Describe and demonstrate soft tissue manipulations, describe the skills
- CO4. Benefits of hydrotherapy,
- **CO5**. Demonstrate and apply different techniques to correct posture & gait and able to perform various assessment



(UGC Approved)

| are define out. | Budriera, Gurugrani-Badii Road, V | Gurugraffi (Haryana) – 122303 | FIL. 0124-2276163, 2276164, 22761 |
|----------------------|-----------------------------------|-------------------------------|-----------------------------------|
| Name of Department: | Physiotherapy | | |
| Course Name: | Manual Therapy | | |
| Course code: 0306040 |)4 | | |

Course Outcomes:

- **CO1.** Able to demonstrate various manual therapy techniques
- CO2. Able to use clinical judgment and decision-making skills while assessing and treating patient so as to provide best quality health care to patients that avoids adverse events and harm them.
- CO3. Able to interpret results of various investigative techniques like X ray etc

| 1. Name of Department: Physiotherapy | | |
|--------------------------------------|---------|--|
| 2. Course Name: Basics of Radio | | |
| | Physics | |
| 3. Course code: 03060405 | | |
| | | |

- 8. Course Outcomes:
- CO1. Student will be able to interpret of plain radiographs as well as of Cross-Sectional imaging studies, such as CT, MR and Ultrasound.
- CO2. Compare and contrast the benefits and limitations of different radiologic modalities including: Plain film, CT, Ultrasound, MR, Nuclear medicine List risks associated with radiation exposure
- CO3. Recognize normal anatomic structures of the chest on imaging exams and become familiar with the range of normal appearances
- **CO4.** Recognize abdominal organs on cross sectional imaging studies
- **CO5.** Use a systematic search pattern for interpreting an plain film
- CO6. Define terms commonly used in radiology reports including: lucency, opacity, attenuation, Hounsfield units (HU), signal
- CO7. Categorize different tissues from most to least opaque on x-ray including: bone, soft tissue, air, metal, and fat
- **CO8.** Have a GLOBAL understanding about Medical Imaging and radiology.
- CO9. Understand how to prepare patients for radiology studies (dealing with allergies, contrastreactions, MRI safety, radiation exposure, etc..)

| Name of Department: | Physiotherapy | |
|----------------------|---------------|--|
| Course Name: | Ergonomics | |
| Course code 03060408 | | |
| Course Outcomes | | |

- **CO1.** Define ergonomics and the various disciplines that contribute to the field
- CO2. Apply knowledge of basic human anatomy, biomechanics, physiology and kinesiology to a human's capacity to do work
- CO3. Identify and quantify the demands of work in terms of primary physical risk factors associated with work-related musculoskeletal disorders (MSDs)
- **CO4.** Summarize other factors that are associated with work related MSDs such as personal and work psychosocial factors
- CO5. Compare the physical demands of a task to human capacity and ergonomics guidelines and identify mismatches that indicate risk
- Perform a basic risk analysis of the design of existing controls and displays



- Budhera, Gurugram-Badli Road, Gurugram (Haryana) 122505 Ph.: 0124-2278183, 2278184, 2278185

 CO7. Perform a root cause analysis of observed ergonomic risk factors
- **CO8.** Demonstrate knowledge of ergonomic approaches to the redesign of work by developing controls that reduce hazards and mitigate risk
- **CO9.** Plan a path to certification or employment in the field of ergonomics
- CO10. Demonstrate a fundamental knowledge of the science of human factors and ergonomics and ethical responsibility in practice



Budhera, Guruqram-Badli Road, Guruqram (Harvana) – 122505 Ph.: 0124-2278183, 2278184, 2278185 Semester-V

| Name of Department: | Physiotherapy | |
|----------------------|------------------------------------|--|
| Course Name: | General Medicine with Pediatrics-I | |
| Course code: 0306050 | 1 | |
| Course Outcomes: | | |

- **CO1.**To understand the pathophysiological changes in infectious and metabolic disorders with their treatment.
- **CO2.** To understand the pathophysiological changes in respiratory disorders with their treatment.
- **CO3.**To understand the pathophysiological changes in cardiovascular disorders with their treatment.
- **CO4.**To understand the pathophysiological changes in hematological conditions with their treatment
- **CO5.**Knowledge and understanding of subject will help the students to plan a good rehabilitation of a pediatric patient along with thorough assessment of a pediatric case.
- **CO6.** The student will be able to differentiate pediatric cases and handling the cases will become easier as they can relate theoretical knowledge with practical learning

| 1. Name of Department: Physiotherapy | | |
|--------------------------------------|---|--|
| 2. Course Name: | General Surgery with OBS. & Gynecology -I | |
| 3. Course code: 03060502 | | |
| Course Outcomes: | | |

- **CO1.**List the indications for surgery, etiology, clinical features and surgical methods for various conditions.
- CO2. Plan a better rehabilitation care for the patients pre and post surgically
- CO3. Clinical decision making ability & management expertise

Name of Department: Physiotherapy

CO4. Diagnose conditions from history taking clinical evaluation and investigations in antenatal and post natal cases

| Traine of Beparement. | 1 Hystotherap y | |
|-----------------------|--|---------|
| Course Name: | General Orthopedics-I | |
| Course code: 03060503 | 3 | |
| Course Outcomes: | | |
| CO1. To understand | traumatology of Upper and lower limb fractures, with their tra | eatment |
| protocols. | | |
| CO2 To understand | the methodbasic leave of remiers managed at least of conditions in | 1 |

- **CO2.** To understand the pathophysiology of various musculoskeletal conditions including congenital and acquired anomalies with its treatment protocol.
- **CO3.** To understand the pathophysiology of various inflammatory and infective conditions of musculoskeletal system with its treatment protocol

| Name of Department: | Physiotherapy | |
|-----------------------|---------------|--|
| Course Name: | Neurology -I | |
| Course code: 03060504 | 4 | |



SGT UNIVERSITY SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved)

Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

Course Outcomes:

- **CO1.** Acquisition of the clinical application of basic knowledge of the nervous system.
- **CO2.** Development of communication skills that will facilitate the clinical interaction with patients with neurologic disorders and their families and thus ensure that complete, accurate data are obtained.
- **CO3.** Development of competency in the single system neurological examination.
- **CO4.** Acquisition of the knowledge necessary for the diagnosis and initial management of common acute and chronic neurological conditions.
- **CO5.** Development of clinical problem-solving skills.
- **CO6.** Development of strategies for health promotion and prevention of neurological damage.
- **CO7.** Development of the attitudes and professional behaviors appropriate for clinical practice.



Budhera, Guruqram-Badli Road, Guruqram (Harvana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

Semester-VI

| Name of Department: | Physiotherapy | |
|----------------------|-------------------------------------|--|
| Course Name: | General Medicine with Geriatrics-II | |
| Course code: 0306060 | 01 | |
| Course Outcomes: | | |

- **CO1.** To understand the pathophysiological changes in GIT conditions with their treatment.
- **CO2.** To understand the pathophysiological changes in Endocrinal problems with their treatment.
- **CO3.** To understand the pathophysiological changes in Kidney conditions with their treatment.
- **CO4.**To understand the pathophysiological changes in dermatological conditions with their treatment.
- **CO5.** To understand the pathophysiological changes in Psychiatric issues with their treatment.
- **CO6.** To understand the various special therapies used in Medicine.
- **CO7.**To understand the common condition affecting the geriatric population and strategies to correct them

| Name of Department: | Physiotherapy |
|---------------------------------|---|
| Course Name: | General Surgery with ENT &Opthalmology-II |
| Course code: 03060602 | 2 |
| Course Outcomes: | |
| CO1. List the indication | ons for surgery, etiology, clinical features and surgical methods for various |

- **CO1.** List the indications for surgery, etiology, clinical features and surgical methods for various conditions.
- CO2. Plan a better rehabilitation care for the patients pre and post surgically
- CO3. Clinical decision making ability & management expertise
- **CO4.** Diagnose conditions from history taking clinical evaluation and investigations in ENT and ophthalmology conditions

| Name of Department: | Physiotherapy | |
|----------------------|-------------------------|--|
| Course Name: | General Orthopaedics-II | |
| Course code: 0306060 | 93 | |
| Course Outcomes: | | |

- **CO1.**To understand the pathological changes of degenerative and metabolic disorders of musculoskeletal system with their respective treatment protocols.
- **CO2.** To understand the pathophysiology of bone tumors with their treatment.
- **CO3.** To understand the various types of amputations with their limitations and treatment.
- **CO4.**To understand the pathophysiology of various soft tissue injuries with their respective treatment protocols.
- **CO5.** To understand the importance of various special surgeries and their treatments.

| Name of Department: | Physiotherapy | |
|---|---------------|--|
| Course Name: | Neurology -II | |
| Course code: 03060604 | | |
| Course Outcomes: | | |
| CO1. Acquisition of the clinical application of basic knowledge of the nervous system. | | |



- Budhera, Gurugram-Badli Road, Gurugram (Haryana) 122505 Ph.: 0124-2278183, 2278184, 2278185

 CO2. Development of communication skills that will facilitate the clinical interaction with patients with neurologic disorders and their families and thus ensure that complete, accurate data are obtained.
- **CO3.** Development of competency in the single system neurological examination.
- CO4. Acquisition of the knowledge necessary for the diagnosis and initial management of common acute and chronic neurological conditions.
- **CO5.** Development of clinical problem-solving skills.
- **CO6.** Development of strategies for health promotion and prevention of neurological damage.
- **CO7.** Development of the attitudes and professional behaviors appropriate for clinical practice.



SGT UNIVERSITY SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved)
Gurugram, Delhi-NCR
Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

Semester- VII

| Name of Department: | Physiotherapy |
|----------------------|--|
| Course Name: | Physiotherapy in Cardio-respiratory conditions |
| Course code: 0306070 | 1 |
| Course Outcomes: | |

- **CO1.** Interpretation of different invasive and non invasive diagnostic investigation to make proper assessment in various respiratory and cardiovascular dysfunction
- **CO2.** Develops the skills to execute different Physiotherapy techniques used in treatment of Cardio-respiratory dysfunctions.
- CO3. To select strategies for cure, care & prevention; adopt restorative & rehabilitative measures for maximum possible functional independence of a patient at home, work place & in community
- **CO4.**Be able to execute the effective Physiotherapeutic measures with appropriate clinical reasoning to improve pulmonary function.
- **CO5.** To design & execute effective tailored cardiopulmonary rehabilitation program.
- **CO6.** To learn and execute the principle of care of patients at the Intensive care area.

| Name of Department: Physiotherapy | | |
|--|--|--|
| Course Name: Physiotheray in Orthopaedics Conditions-I | | |
| Course code: 03060603 | | |
| Course Outcomes: | | |
| CO1 Assessment of patients sustaining orthogaedic injuries | | |

CO1. Assessment of patients sustaining orthopaedic injuries.

Name of Department: Physiotherapy

- **CO2.** Development of injury prevention program for the society.
- **CO3.** Understanding and development of nutrition program for the prevention of disorders related to nutrition deficiency.
- **CO4.** Student will be able to work out proper therapeutic techniques for the efficient management of the populations.

| Traine of Department. Thysiotherapy | | | |
|-------------------------------------|--|----------------------------------|--|
| Cours | e Name: | Physiotherapy in Neurology -I | |
| Course | Course code: 03060703 | | |
| Course | Outcomes: | | |
| CO1. | Knowledge abo | ut the development of the brain. | |
| CO2. | CO2. Understand the anatomy and physiology of central and peripheral nervous system | | |
| CO3. | CO3. Identify the disability due to neurological dysfunction . | | |
| CO4. | CO4. Learn the physical assessment in Neurologoical conditions | | |
| CO5. | CO5. Understand the various Physiotherapy techniques used in management of Neurologoical | | |
| condition. | | | |

| Name of Department: | Physiotherapy | |
|-----------------------|--------------------------------|--|
| Course Name: | Physiotherapy in Sports Injury | |
| Course code: 03060704 | | |
| Course Outcomes: | | |



Budhera, Guruqram-Badli Road, Guruqram (Haryana) – 122505 Ph.: 0124-2278183, 2278184, 2278185

- **CO1.** Assessment of players sustaining sports related injuries.
- **CO2.** On field evaluation and basic knowledge of first aid which are the cornerstones of management of any sports injury.
- **CO3.** Development of injury prevention program for the sports playing population.
- **CO4.** Understanding and development of individual diet and nutrition program for the sports population.
- CO5. Prevention and minimizing various risk factors of sports injuries.
- **CO6.** Student will be able to work out proper fitness regimen and rehabilitation protocol for various sports injuries.

| Name of Department: Physiotherapy | | |
|--|----------|--|
| Course Name: | Research | |
| Course code: 03060705 | | |
| Course Outcomes: | | |
| CO1. Understand the importance of research in the relative field. | | |
| CO2. Understand the basic concepts and methods of research. | | |



Budhera, Guruqram-Badli Road, Guruqram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Semester-VIII

| Name of Department: | Physiotherapy | |
|-----------------------|--|--|
| Course Name: | Physiotherapy in General Medical & Surgical conditions | |
| Course code: 03060801 | | |
| Course Outcomes: | | |

- **CO1.** To set the goals and execute rehabilitation program to achieve them in different surgical conditions
- **CO2.** Physiotherapy assessment and to execute prenatal and postnatal Physiotherapy, prescription of different types of exercises to maintain the women health
- **CO3.**To make proper Physiotherapy assessment and design rehabilitation program for patients with organ transplantation.
- **CO4.** Physiotherapy assessment and execution of appropriate Physiotherapy intervention in Wound, Ulcers, Pressure sores, Diabetes Mellitus, Burn and other skin conditions.
- **CO5.**To make Physiotherapy assessment, functional assessment and application of different Physiotherapy techniques in various Pediatric conditions.
- **CO6.** To implement the Physiotherapy rehabilitation program in Geriatric population according to need of the patients.
- **CO7.** To implement different types of exercises in various Psychiatrics conditions.

| Name of Department: | Physiotherapy | | |
|--|--|--|--|
| Course Name: | Physiotherapy in Orthopedics conditions-II | | |
| Course code: 03060802 | | | |
| Course Outcomes: | | | |
| CO1 Assessment of nations sustaining orthogodic injuries | | | |

- **CO1.** Assessment of patients sustaining orthopaedic injuries.
- **CO2.** Development of injury prevention program for the society.
- **CO3.**Understanding and development of nutrition program for the prevention of disorders related to nutrition deficiency.
- **CO4.** Student will be able to work out proper therapeutic techniques for the efficient management of the populations.

| Name of Department: | Physiotherapy | |
|-----------------------|--------------------------------|--|
| Course Name: | Physiotherapy in Neurology -II | |
| Course code: 03060803 | 3 | |
| Course Outcomes: | | |

- CO1. Knowledge about pediatric conditions.
- **CO2.** Identify the disability due to neurological dysfunction.
- **CO3.** Learn the physical assessment in Neurological conditions of the central nervous system and peripheral nervous system.
- **CO4.** Understand the various Physiotherapy techniques used in management of Neurological conditions of the central nervous system and peripheral nervous system.
- **CO5.** Understand the basic principles of Physiotherapy assessment, functional assessment and application of Physiotherapy in various Cranial & Spinal surgeries.



SGT UNIVERSITY SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY (UGC Approved)

Gurugram, Delhi-NCR

0124-2278183, 2278184, 227818

Name of Department: Physiotherapy

Course Name: Rationale of Rehabilitation, Ethics in Physiotherapy & Law

Course code: 03060804

Course Outcomes:

- **CO1.** To understand the team approach in rehabilitation of disability.
- CO2. To understand the role of community and other institutions for rehabilitation.
- **CO3.** Identification of residual potentials in patients with partial or total disability (temporary or permanent).

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph.

- **CO4.** Formulation of appropriate goals (long & short term) in treatment & rehabilitation will be discussed.
- **CO5.** Application of various orthosis, prosthesis, wheelchairs and other assistive devices for different medical and Physical conditions.
- **CO6.** To understand the importance of administration in setting of department.
- CO7. To understand the organizational structure of a department or an organization.
- **CO8.**To understand the relationship between juniors, seniors and supervisors of an organization
- **CO9.** Understand the importance of Ethics in the relative field.
- CO10. Understand the basic concepts of Ethics.

| Name of Department: | Physiotherapy | |
|-----------------------|---------------|--|
| Course Name: | Biostatistics | |
| Course code: 03060805 | | |

Course Outcomes:

- **CO1.** Interpret differences in data distributions via visual displays
- CO2. Calculate standard normal scores and resulting probabilities
- CO3. Calculate and interpret confidence intervals for population means and proportions
- CO4. Interpret and explain a p-value
- **CO5.** Perform a two-sample t-test and interpret the results; calculate a 95% confidence interval for the difference in population means
- **CO6.** Select an appropriate test for comparing two populations on a continuous measure, when the two sample t-test is not appropriate
- **CO7.** Understand and interpret results from Analysis of Variance (ANOVA), a technique used to compare means amongst more than two independent populations
- **CO8.** Choose an appropriate method for comparing proportions between two groups; construct a 95% confidence interval for the difference in population proportions
- CO9. Understand and interpret relative risks and odds ratios when comparing two populations
- CO10. Understand why survival (timed to event) data requires its own type of analysis techniques
- CO11.Interpret the result of a log-rank test in the context of comparing the "survival experience" of multiple cohorts