

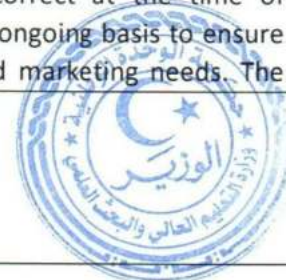
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Graduation Project

1	Course name	Graduation project
2	Course Code	PT404
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	2
5	Educational hours	4
6	Pre-requisite requirements	All 1 st , 2 nd & 3 rd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022
Brief Description:		Training on project establishment and methodology of execution including literature reviewed and use scientific information resources
Textbooks and References:		The students will use different resources.
Course Duration		56 weeks
Course Objectives:		<p>Upon completion of this course, the student will have reliably demonstrated the ability to:</p> <ol style="list-style-type: none"> 1- Define the Principles of research planning and design 2- Describe principles of basics of experimental design and analysis. 3- Identify suitable research topics. 4- Undertake independent research.



	<p>5- Be able to do Critical review and analysis of related literature.</p> <p>6- Design research study</p> <p>7- Perform method validation and presentation of research report.</p> <p>8- Write the research proposal and theses.</p> <p>9-Demonstrate appropriate communication skills.</p> <p>10- Present clearly and effectively scientific topic in a tutorial or a staff meeting.</p> <p>11- Work separately or in a team to research and prepare a scientific topic.</p>
Course Assessments	PPT Slides -End of semester after presentation
Content Breakdown	Topical Coverage
Session 1 (Week 1) Session 14 (Week 14)	<p>Development of a research protocol</p> <p>Fieldwork and data analysis</p> <ul style="list-style-type: none"> - The research project course involves the generation of new scientific information and a review and understanding of the scientific literature. - The research may be conducted in a laboratory, hospital, community laboratories, different company, etc., depending on the project and the supervisor. - Students are divided into groups and each group is working together. - Students are expected to work approximately 56 hours. This will include working in the laboratory, etc., reading or searching literature, and writing up the research project. - Fields of study available may include: <ul style="list-style-type: none"> o Biomedical genetics o Immunogenic o Cancer genetics o Biochemistry o Genetics Diagnosis o Embryology
Session 15 (Week 15) Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
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General Rehabilitation

1	Course name	General Rehabilitation
2	Course Code	PT402
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	2
5	Educational hours	2
6	Pre-requisite requirements	All 1 st , 2 nd & 3 rd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:	This course will provide students with a fundamental understanding of Rehabilitation basics. Rehabilitation is founded on the philosophy that every individual has the inherent tendency and right to be an expert in their own health care. This, therefore, marks the distinction between acute care and rehabilitation, where acute care is concerned with an individual's survival, while rehabilitation is concerned with the education and training of individuals to be able to carry out activities of daily living by themselves, thus promoting self-care and functional independence. Despite this there is currently no universal definition or understanding of rehabilitation, and it is portrayed in many ways depending on the context, including as a development issue, disability issue, health issue, human rights issue, substance abuse issue, and security issue, to name a few. As such there are a broad range of definitions for rehabilitation used by different authorities.
Textbooks required for this Course:	Butler, D.S, Moseley, L. (2003). Explain Pain. Adelaide. Noigroup Publications. Merskey H, Bogduk N. Classification of chronic pain. 2nd ed. Seattle: IASP Press; 1994. Many other learning materials.
Course Duration	28 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	Rehabilitation objectives include: 1. Students can identify strategies for self-awareness and self-development that will promote coping and adjustment to disability. 2. Students can practice rehabilitation in a legal and ethical manner, adhering to the Code of Professional Ethics and Scope of Practice for the profession.



	<p>3. Students can integrate into practice an awareness of social issues, trends, public policies and developments as they relate to rehabilitation.</p> <p>4. Students can assist employers to identify, modify, or eliminate, architectural, procedural and/or attitudinal barriers.</p>
Course Assessments	<p>Assignment1: 30%.</p> <p>Assignment2:10%</p> <p>Final Exam: 60%</p> <p>60 % is required for a pass in this course.</p>
Content Breakdown	Topics Coverage
Session 1 (Week 1)	<p>Topicstobecovedinthesession (week):</p> <ul style="list-style-type: none"> • Introduction to Rehabilitation
Session 2 (Week 2)	<p>Assignment1handedout</p> <p>Topicstobecovedinthesession (week)</p> <ul style="list-style-type: none"> • Delivery of Rehabilitation Care: The Team • Therapeutic Exercises and Other Alternative Techniques in Treatment
Session 3 (Week 3)	<p>Topics to be covered in the session (week)</p> <ul style="list-style-type: none"> • Sociolegal Aspects of Rehabilitation • Principles in Management of Communication Impairment • Behavioral and Learning Problems in the Disabled
Session 4 (Week 4)	<p>Geriatric Conditions</p> <p>Orthotics</p> <p>Amputation and Prosthetics</p> <p>Mobility Aids</p>
Session 5 (Week 5)	<p>Topicstobecovedinthesession (week)</p> <ul style="list-style-type: none"> • Architectural Barriers • Activities of Daily Living • Vocational Rehabilitation
Session 6 (Week 6)	<p>Topicstobecovedinthesession (week)</p> <ul style="list-style-type: none"> • Physical Agents Used in the Management of Pain and Paralysis
Session 7 (Week 7)	<p>Topicstobecovedinthesession (week)</p> <p>Congenital Malformations</p> <p>Rehabilitation of Cerebral Palsy</p>
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9) Session 14 (Week 14)	<p>Topicstobecovedinthesession (week/s)</p> <ul style="list-style-type: none"> • Rehabilitation of Poliomyelitis • Rehabilitation of Brain Injury • Stroke Rehabilitation • Peripheral Nerve Injuries • Common Deformities and the Role of Surgery in Rehabilitation • Rehabilitation of Muscular Dystrophy • Rehabilitation of Spinal Cord Injury • Sports Rehabilitation and Exercises for Positive Health • Other Neurological Conditions • Cardiac and Pulmonary Rehabilitation • Vascular and Hematological Conditions • Rehabilitation of Burns • Rehabilitation of Arthritis



	<ul style="list-style-type: none"> • Rehabilitation of Fractures • Common Pain Syndromes
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Cardio -Respiratory & Physiotherapy Management

1	Course name	Cardio -Respiratory & Physiotherapy Management
2	Course Code	PT302
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	All 1 st 2 subjects to pass max. 2subjects for reset.
7	Program offered the course	Physiotherapy department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:

Heart and lung Health is an important topic especially because your heart is one of the vital organs keeping you alive and active. The link between heart health and physiotherapy is still one being researched today, however, there has been enough studies completed to prove that the heart greatly depends on the activity levels in one's body, which is true before and after any cardiovascular problems arise. Physiotherapy can help the blood flow more easily through the heart, can help open up vessels, and overall strengthens the muscles in the heart. For those who are at high risk of developing Heart Disease, it is important to seek physiotherapy. The main goal of this subject is to help student to good knowledge of patients rehabilitate and get their bodies



	and hearts back to their best performance. We take a thorough approach to all physiotherapy and can also recommend other therapies,
Textbooks required for this Course:	Chaves GS, Freitas DA, Santino TA, Nogueira PA, Fregonezi GA, Mendonça KM. Chest physiotherapy for pneumonia in children. Cochrane Database of Systematic Reviews. And other text books.
Course Duration	56 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	<p>Learning Outcomes and Objectives</p> <p>Student should be able to:</p> <ol style="list-style-type: none"> 1. Understand and explain the physiological responses and adaptations of muscle to exercise and training. 2. Apply clinical reasoning to problems with cardiac rehabilitation exercise programmes for patient with cardiac disease. 3. Integrate and evaluate evidence in relation to the design of phase IV exercise programmes for cardiac disease patients. 4. Evaluate problem scenarios in relation to exercise programmes for CVD patients. 5. Implement emergency procedures for cardiac patients. 6. Conducting motivational interviews with respect to exercise and other health behaviours.
Course Assessments	<p>Assignment1: 30%.</p> <p>Assignment2:10%</p> <p>Final Exam: 60%</p> <p>60 % is required for a pass in this course.</p>
Content Breakdown	Topics Coverage
Session 1 (Week 1)	<ul style="list-style-type: none"> • Anatomy of the Human Heart • Cardiac Depression Scale • Cardiac Rehabilitation
Session 2 (Week 2)	<ul style="list-style-type: none"> • Assessment of Breathing Pattern Disorders • ICU Acquired Weakness • ICU Delirium
Session 3 (Week 3)	<ul style="list-style-type: none"> • Physiotherapists Role in ICU • Assisted Coughing • Asthma
Session 4 (Week 4)	<ul style="list-style-type: none"> • Cardiopulmonary Exercise Testing (CPET) In Adults • Cardiovascular Considerations in the Older Patient
Session 5 (Week 5)	<ul style="list-style-type: none"> • Postural Drainage • Postural Tachycardia Syndrome (POTS) • Pulmonary Embolism
Session 6 (Week 6)	<ul style="list-style-type: none"> • Cardiovascular Disease • Percussion • Peripheral Arterial Disease
Session 7 (Week 7)	<ul style="list-style-type: none"> • Cardiovascular Exercises For Elderly • Chest Drains
Session 8 (Week 8)	

	<ul style="list-style-type: none"> • Rehabilitation of Fractures • Common Pain Syndromes
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
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Cardio -Respiratory & Physiotherapy Management

1	Course name	Cardio -Respiratory & Physiotherapy Management
2	Course Code	PT302
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	All 1 st 2 subjects to pass max. 2subjects for reset.
7	Program offered the course	Physiotherapy department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:

Heart and lung Health is an important topic especially because your heart is one of the vital organs keeping you alive and active. The link between heart health and physiotherapy is still one being researched today, however, there has been enough studies completed to prove that the heart greatly depends on the activity levels in one's body, which is true before and after any cardiovascular problems arise. Physiotherapy can help the blood flow more easily through the heart, can help open up vessels, and overall strengthens the muscles in the heart. For those who are at high risk of developing Heart Disease, it is important to seek physiotherapy. The main goal of this subject is to help student to good knowledge of patients rehabilitate and get their bodies

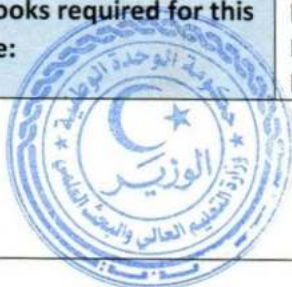


	<ul style="list-style-type: none"> • Physical Activity and Cardiovascular Disease • Physical Activity and Respiratory Conditions • Improve Pulmonary Function & Physiotherapy and Pilates to • Physiotherapy in Palliative Care • Pleural Effusion
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
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Anatomy & physiology

1	Course name	Anatomy & physiology
2	Course Code	PT204
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	All 1 st subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy D.
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:	The broad goal of the teaching of undergraduate students in Anatomy aims at providing comprehensive knowledge of the gross anatomy, microscopic structures, development of human body and principles of genetics to provide a basis for understanding the clinical correlation of organs or structure involved and the skills to practice as a qualified Physiotherapist.
Textbooks required for this Course:	Pharmacology by Gaddum. Pharmacology & Pharmacotherapeutics Revised 19th Edition 2005 by Dr.S.D.Satoskar & Dr.S.D. Bhandarkar . Essential of Medical Pharmacology 5th Edition 2003 By Dr.K.D.Tripathi



Course Duration	56 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	<ul style="list-style-type: none"> • At the end of the course, the student should be able to: • Comprehend the normal disposition, inter-relationships, gross, functional and applied anatomy of the musculoskeletal system, locomotion, posture, gait and various organs in the body. • Comprehend the basic structure and connections between the various parts of the central nervous system so as to analyze the integrative and regulative functions of the organs and systems. • He/she should be able to locate the site of gross lesions according to the deficits encountered. • Identify the microscopic structures of various tissues and organs in the human body and correlate the structure with the functions. • To understand the basic principles of embryology including genetic inheritance and stages involved in development of the organs and systems from the time of conceptions till birth. • To study the basic principles of radiology and for comprehending deeper structures in the human body.
Course Assessments	Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.
Content Breakdown	Topical Coverage
Session 1 (Week 1)	Topics to be covered in the session (week): GENERAL ANATOMY: · Introduction to the subject, Subdivisions of anatomy, Anatomical positions, Descriptive terms. Bones: Definition of bone, Classification – Morphological , structural- Macroscopic & Microscopic, Developmental, Regional, Structure of long Bone , Parts of long bone- epiphysis, diaphysis, metaphysis.
Session 2 (Week 2)	Assignment 1 handed out Topics to be covered in the session (week) • Types of epiphysis, Ossification- Primary and secondary centers, Law of ossifications, Blood supply, Functions, – Level 2: Medico-legal importance & applied anatomy.
Session 3 (Week 3)	Topics to be covered in the session (week) Cartilage : Definition, classification, structure distribution, Applied Anatomy · Joints : Definition, classification, fibrous, cartilaginous & synovial Nerve supply, blood supply of joints
Session 4 (Week 4)	Drug acting on CNS : Level 2: Factors limiting, range of movement, Joint Position- Loose packed, close packed – Level 3: Osteoarthritis, dislocation. · Muscles: Definition, Types- skeletal, cardiac, visceral.
Session 5 (Week 5)	Topics to be covered in the session (week) • Skeletal muscle – Origin, insertion, Morphological Classification, Functional classification - Prime movers, fixators, antagonists,



	synergists. Red and white muscle fibres. Action of muscles – Isotonic, isometric, eccentric.
Session 6 (Week 6)	Topics to be covered in the session (week) <ul style="list-style-type: none"> • Level 2: Power of muscle, range of contraction, active Insufficiency, passive insufficiency, structural and functional correlation, hypertrophy, hyperplasia, Shunt, swing and spin components of muscle. Distribution, structure, blood supply, nerve supply, Neuromuscular junctions, Body lever system.
Session 7 (Week 7)	Topics to be covered in the session (week) <ul style="list-style-type: none"> Level 3: Paralysis, atrophy, myasthenia gravis • Skin – Thin & thick, appendages, dermatomes – Level 2: Tension lines, flexure lines Langer's lines – Level 3: Skin grafts
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9)	Topics to be covered in the session (week) <ul style="list-style-type: none"> • REGIONAL ANATOMY: UPPER LIMB: • Regions- Breast, Shoulder region, Axilla, Arm, Cubital fossa, Forearm, Hand. – Level 2: Grips of hand, forearm spaces, radial bursa, ulnar bursa, palmar spaces, Dupuytren's contracture, carpal tunnel syndrome, breast cancer
Session 10 (Week 10)	Topics to be covered in the session (week) <ul style="list-style-type: none"> • – Level 3: Axilla- abscess drainage. Fascial spaces- Surgical significance • Bones: Scapula, Clavicle, Humerus, Radius, Ulna, Articulated hand – Level 3: Fractures of clavicle, humerus, scaphoid Colles fracture, Mallet finger, trigger finger • Joints - shoulder girdle, shoulder joint, Elbow, radioulnar joints, Wrist, first carpometacarpal joint – Level 2 : Dislocation of shoulder, carrying angle
Session 11 (Week 11)	Drugs acting on CVS : <ul style="list-style-type: none"> - Blood vessels-Arteries Axillary, brachial, radial, ulnar • Veins – cephalic, basilic, median cubital • Lymphatics – Axillary lymph nodes – Level 3 : Veins- thrombosis; intravenous injection, Lymphangitis, lymphadenitis • Nerves- Brachial plexus, axillary, median, ulnar, musculocutaneous, Radial nerves, Dermatomes.
Session 12 (Week 12)	Drug acting on Respiratory system LOWER LIMB: <ul style="list-style-type: none"> • Regions: Compartments of thigh, femoral triangle, adductor canal, Gluteal region, Popliteal fossa, Leg, arches of foot, sole. – Level 2 : Pes cavus, pes planus, club foot. Walking cycle. • Bones – Hip, Femur, Tibia, Fibula, Patella, Articulated foot, – Level 2: Blood supply to head of femur, fracture neck of femur.
Session 13 (Week 13)	Muscles :Quadriceps femoris, sartorius, Psoas major, Iliacus, Gluteus maximus: medius and minimus, quadratus femoris, Biceps femoris, Semitendinosus, Semimembranosus, Popliteus, Adductor longus brevis and magnus, Soleus, Gastrocnemius, Tibialis anterior



Session 14 (Week 14)	VERTEBRAL COLUMN: Normal curvatures, abnormal curvatures, intervertebral disc, Posture and Gait, line of gravity ,centre of gravity, Weight, transmission, postural muscles.
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
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Gynecology & Obstetrics

1	Course name	Gynecology & Obstetrics
2	Course Code	PT300
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	All 1 st , 2 nd & 3 rd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:

The course focuses on the women's health issues including pre and post natal women.

The bachelor course emphasized in a subspecialty in physiotherapy concerned with the promotion of health throughout the childbearing period and helps the mother to adjust advantageously to the physical and psychological changes of pregnancy and the postnatal period. The role of the therapist in Obstetrics and Gynecology, Involves throughout the period of pregnancy, labour and puerperium and the preoperative and postoperative periods.



Textbooks required for this Course:	Text Book of Gynaec- Dutta Text Book of Obs- Dutta
Course Duration	56 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	<p>At the end of the course, the candidate will</p> <ul style="list-style-type: none"> • Be able to describe the normal & abnormal physiological events during the Puberty, Pregnancy, Labor, Puerperium & Pre, Peri & Post Menopause. • Be able to discuss common complications during Pregnancy, Labour, Puerperium & Pre, Peri & Post-Menopausal stage & various aspects of Pelvic floor Dysfunction & the management in brief. • Demonstrate an ability to integrate the patient assessment into an appropriate management plan using the concepts and strategies of clinical reasoning • Proof of work experience
Course Assessments	<p>Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.</p>
Content Breakdown	Topical Coverage
Session 1 (Week 1)	<p>Topicstobecoveredinthesession (week):</p> <ul style="list-style-type: none"> • Physiology of Puberty & Menstruation, Abnormalities & common problems of Menstruation
Session 2 (Week 2)	<p>Assignment1handedout Topicstobecoveredinthesession (week)</p> <ul style="list-style-type: none"> • Pregnancy—Fertilization, Development of the foetus, Normal gestations, Abnormal/Multiple gestations
Session 3 (Week 3)	<p>Topics to be covered in the session (week)</p> <ul style="list-style-type: none"> • Common Complications during pregnancy like P I H, Eclampsia, Diabetes, Hepatitis, German Measels, TORCH infection.
Session 4 (Week 4)	<p>Geriatric Conditions</p> <ul style="list-style-type: none"> • Labor: Normal-Events of Ist, IInd&IIIrd Stages of labor
Session 5 (Week 5)	<p>Topicstobecoveredinthesession (week)</p> <ul style="list-style-type: none"> • Common Complications during labor & management. • Caesarian section
Session 6 (Week 6)	<p>Topicstobecoveredinthesession (week)</p> <ul style="list-style-type: none"> • Post Natal –Puerperium, lactation, Overview of Contraception
Session 7 (Week 7)	<p>Topicstobecoveredinthesession (week)</p> <p>D. Post Natal –Overview of complications of repeated child bearing with small gaps</p>
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9) Session 14 (Week 14)	<p>Topicstobecoveredinthesession (week)</p> <p>E. Overview of family planning</p> <p>F. Uro-genital dysfunction</p> <ol style="list-style-type: none"> 1. Uterine prolapse-classification & management (Conservative /Surgical) 2. Cystocoele, Rectocoele, Enterocoele <ul style="list-style-type: none"> • Neoplasm of Female reproductive organs-surgical management - Level 3



	<ul style="list-style-type: none"> Pre, Peri & Post Menopause-Physiology, Complications & management Pelvic Inflammatory Diseases with special emphasis to backache due to CLINICAL- Evaluation & presentation of two cases each in a) Pelvic floor dysfunction b) Antenatal care c) Postnatal care i) Following normal labor ii) Following Caesarean section d) Pelvic Inflammatory Diseases OBSERVATION- One Normal & One Caesarian delivery, one case of Tubectomy & One Hysterectomy /Repair of the Uro-genital Prolapse.
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
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Hospital Placement & Training 2

1	Course name	Hospital Placement & Training 2
2	Course Code	PT405
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	2
5	Educational hours	4
6	Pre-requisite requirements	All 1 st , 2 nd & 3 rd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022



Brief Description:	Increase the ability to: 1). Identify, discuss & analyze the Musculoskeletal Dysfunction in terms of Biomechanical, Kinesiological & Biophysical bases & correlate the same with the provisional diagnosis & arrive at appropriate Functional Diagnosis with Clinical Reasoning. 2). Plan & prescribe as well as acquire the skill of executing short & long term Physiotherapy treatment by selecting appropriate modes of Mobilization / Manipulations, Electro Therapy, Therapeutic exercises & appropriate Ergonomic Advise for the relief of pain, restoration / maintenance of function & rehabilitation for maximum functional independence in A.D.L at home & work place.
Textbooks required for this Course:	1. Cash's Textbook of Orthopedics & Rheumatology for PTists – Patricia Downie 2. Therapeutic exercise – Kisner 3. Essentials of Orthopedics & Applied Physiotherapy – Jayant Joshi 4. Physical Rehabilitation – O'Sullivan 5. Manual Mobilisation of extremity joints- Freddy Kalterborne 6. Orthopedic Physical Therapy – Donatelli 7. Neural tissue mobilization – Butler 8. Manual Therapy – Maitland 9. Manual of Myofascial Release – Carol Manhein 10. Muscle energy techniques – Leon Chaitow 11. Taping Tech - Mac Donald Rose 12. Essentials of Orthopedics for PTists- Ebnezer 13. Callietseries 14. Clinical Ortho Rehab - Brotzman
Course Duration	56 hours No additional hours of homework per day is expected during this course.
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	<p>The aim of practice education is to offer a range of practice-based learning experiences that encourage the application and development of theoretical knowledge and practical skills learned during academic modules, transforming it into the deep contextual knowledge required within professional practice:</p> <ol style="list-style-type: none"> 1. The student will have an identified clinical educator within a health care setting where they will have the opportunity to use and develop clinical knowledge and skills acquired during the previous modules. 2. The student should have the opportunity to identify learning needs from previous clinical experiences and attempt to address these needs within a different health care situation. 3. The opportunity will exist to learn new profession specific skills and to acquire new knowledge. Where possible, a key feature of these modules will be the development of learning sets whereby students will facilitate each others' learning.
Course Assessments	Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.
Content Breakdown	Topics Coverage
Session 1 (Week 1)	Evaluation, interpretation of investigations & functional diagnosis with appropriate clinical reasoning for planning & implementation of management techniques. Planning, Prescription & Implementation of short term & long term goals with clinical reasoning.



	Documentation. Application of appropriate electro therapeutic modes for relief of acute & chronic pain & swelling; wound healing, re-education etc with clinical reasoning.
Session 2 (Week 2)	Application of Simple therapeutic modes for muscle strength & joint mobility. Advanced therapeutic modes of mobility like Mobilization . Techniques [Techniques covered in III rd B.P.T.], Friction Massage, Myofascial Release, Muscle Energy Techniques & Neuro Dynamic Techniques on patients. Application of various taping methods for support & relief of pain
Session 3 (Week 3)	Topics to be covered in the session (week) <ul style="list-style-type: none"> • Posture Correction & Gait Training • Prescription of appropriate orthotic & prosthetic devices & fabrication of simple temporary splints. 10] Application of appropriate Therapeutic exercises using therapeutic gymnastic tools as and when necessary, for the relief of pain, structural stability, strength & endurance & functional restoration including gait training and exercises for the preventive measures. 11] Appropriate Home Programme & Ergonomic advice for preventive measures & functional efficiency at home & work place, advice to Parents & Care Givers.
Session 4 (Week 4)	Spine – Conditions related to thoracic spine /cervical spine /lumbar spine Eg. torticollis, radiculopathy, myelopathy, mechanical pain, T.M.syndrome, Thoracic outlet syndrome, disc prolapse, lysis, listhesis, SI joint dysfunction(level I) Manual Therapy
Session 5 (Week 5)	Surface Anatomy. Examination of joint integrity , Contractile tissues ,non contractile tissues. Mobility – osteokinematics, arthrokinematics & end feel.
Session 6 (Week 6)	Topics to be covered in the session (week) Neurodynamic techniques
Session 7 (Week 7)	Mobility – osteokinematics, arthrokinematics & end feel . Evaluation & treatment of soft tissue structures a) Skin & superficial fascia b) body contour c) Myofascial structures - Level 2 –Trigger point assessment & treatment. Pain – Original & Referred. Tissue Response to immobilization &remobilizationpics to be covered . Overuse injuries Pathomechanics, types, assessment, functional diagnosis based on ICF, surgical &physiotherapy management
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9)	Clinical Reasoning Process in Manual Therapy. Basic principles, indications & contraindications of mobilization skills for extremity joints & soft tissues:
Session 14 (Week 14)	i) Maitland . ii) Kaltenborn . iii) Mulligan. iv) McKenzie. e) MET. f) Myofascial release. g) Cyriax. h) Neuro-Dynamic Testing. Basics in Neuro Therapeutics Skills & Applications with Clinical reasoning :



	i) Principles of Neuro Developmental Technique, Rood's Technique (only theory), PNF, Brunnstrom . ii) Technique (Demonstration on patients, practice on models) . iii) Indications for Application Assessment of Movement Dysfunction.
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Hospital Placement & Training 1

1	Course name	Hospital Placement & Training 1
2	Course Code	PT306
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	2
5	Educational hours	4
6	Pre-requisite requirements	All 1 st & 2 nd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:



Increase the ability to: 1). Identify, discuss & analyze the Musculoskeletal Dysfunction in terms of Biomechanical, Kinesiological & Biophysical bases & correlate the same with the provisional diagnosis & arrive at appropriate Functional Diagnosis with Clinical Reasoning. 2). Plan & prescribe as well as acquire the skill of executing short & long term Physiotherapy treatment by selecting appropriate modes of Mobilization

	/ Manipulations, Electro Therapy, Therapeutic exercises & appropriate Ergonomic Advise for the relief of pain, restoration /maintenance of function & rehabilitation for maximum functional independence in A.D.L at home & work place.
Textbooks required for this Course:	1. Cash's Textbook of Orthopedics & Rheumatology for PTists – Patricia Downie. 2. Therapeutic exercise – Kisner. 3. Essentials of Orthopedics & Applied Physiotherapy – Jayant Joshi. 4. Physical Rehabilitation – O'Sullivan. 5. Manual Mobilization of extremity joints- Freddy Kalterborne. 6. Orthopedic Physical Therapy – Donatelli. 7. Neural tissue mobilization – Butler. 8. Manual Therapy – Maitland. 9. Manual of Myofascial Release – Carol Manhein.10. Muscle energy techniques – Leon Chaitow.11. Taping Tech - Mac Donald Rose 12. Essentials of Orthopedics for PTists- Ebnezer. 13. Calliet series.14. Clinical Ortho Rehab - Brotzman
Course Duration	56 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	Evaluation, interpretation of investigations & functional diagnosis with appropriate clinical reasoning for planning & implementation of management techniques. Planning, Prescription & Implementation of short term & long term goals with clinical reasoning. Documentation. Application of appropriate electro therapeutic modes for relief of acute & chronic pain & swelling; wound healing, re-education etc with clinical reasoning. Application of Simple therapeutic modes for muscle strength & joint mobility. Application of Advanced therapeutic modes of mobility like Mobilization Techniques [Techniques covered in III rd B.P.T.], Friction Massage, Myofascial Release, Muscle Energy Techniques & Neuro Dynamic Techniques on patients. Application of various taping methods for support & relief of pain. Posture Correction & Gait Training. Prescription of appropriate orthotic & prosthetic devices & fabrication of simple temporary splints. Application of appropriate Therapeutic exercises using therapeutic gymnastic tools as and when necessary, for the relief of pain, structural stability, strength & endurance & functional restoration including gait training and exercises for the preventive measures. Appropriate Home Programme & Ergonomic advise for preventive measures & functional efficiency at home & work place, advice to Parents & Care Givers.
Course Assessments	Final Exam: 100% A 60 % is required for a pass in this course
Content Breakdown	Topical Coverage
Session 1 (Week 1)	<ul style="list-style-type: none"> FRACTURE AND DISLOCATION I) Upper extremity II) Lower extremity III) Spine – Cervical, Thoracic & Lumbar
Session 2 (Week 2)	Traumatic amputation, Overuse injuries, Crush injuries Assignment 2 handed out
Session 3 (Week 3)	Topics to be covered in the session (week) <ul style="list-style-type: none"> Lumbar plexuses injuries & peripheral nerve injuries



Session 4 (Week 4)	Topics to be covered in the session (week) <ul style="list-style-type: none"> Sports injuries: Classification of sports injuries, risk factors for sport injuries, assessment, functional diagnosis based on ICF, preventive measures.
Session 5 (Week 5)	Topics to be covered in the session (week) Continue Sports injuries: Surgical & physiotherapy management, Objective Outcome measures & recent advances in rehabilitation
Session 6 (Week 6)	Topics to be covered in the session (week) Neurodynamic techniques
Session 7 (Week 7)	Topics to be covered in the session (week) <ul style="list-style-type: none"> Overuse injuries Pathomechanics, types, assessment, functional diagnosis based on ICF, surgical & Physiotherapy management
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9) Session 14 (Week 14)	Topics to be covered in the session (week) Epilepsy Mental Retardation Genetically transmitted neuro-muscular conditions
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Electrotherapy & therapeutic

1	Course name	Electrotherapy & therapeutic
2	Course Code	PT200
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4



6	Pre-requisite requirements	All 1 st subject to pass max. 2subjects for reset.
7	Program offered the course	Physiotherapy department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:	The broad goal of the teaching of undergraduate students in Fundamentals of Electro Therapy aims at providing comprehensive knowledge of the physics, principles & Laws of Electricity & Electro , magnetic spectrum, understand the fundamental principles and uses of various modalities based on the type of energy utilized by each. Analyze the relationship between wavelength and frequency for electromagnetic energy. To acquire skills required to practice and use superficial thermal agents.
Textbooks required for this Course:	1] Clayton's Electro therapy – Kitchen-3RD Ed 2] Clayton's Electro therapy – Kitchen-10th Ed 3] Electro therapy explained –by Low & Reed 4] Electrotherapy: Evidence Based Practice- Kitchen 11th Ed 5] Clayton's Electro therapy – Kitchen-3RD Ed 6] Clayton's Electro therapy – Kitchen-10th Ed 7] Electro therapy explained –by Low & Reed 8] Electrotherapy: Evidence Based Practice- Kitchen 11th Ed REFERENCE BOOK 1] Principles & Practice of Electro Therapy –Joseph Kahn 2] Clinical Electro Therapy-by Nelson & Currier 3] Thermal Agents – by Susan L. Michlovitz 4] Principles & Practice of Electro Therapy- Dr Saeed Anwar
Course Duration	56 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	<p>Upon completion of this course, the student will have reliably demonstrated the ability to:</p> <ul style="list-style-type: none"> a. Understand the physics, principles & Laws of Electricity & Electro-magnetic spectrum b. Describe in brief, certain common electrical components such as transistors, valves, capacitors, transformers etc c. Describe the mains electrical supply, Electric shock & precautions, Basic electrical components & their functions d. Explain the various ways electrical energy can be used to produce a therapeutic effect. e. Enumerate types of currents & describe production of High Frequency, Medium Frequency & Low Frequency electrical currents. f. Describe various types of electrodes used in therapeutics, describe electrical skin resistance & significance of various media used to reduce skin resistance g. Acquire knowledge of various superficial thermal agents, their physiological & therapeutic effects, Merits & Demerits.



	h. Describe effects of environmental & man-made electro- magnetic field at the cellular level & risk factors on prolonged exposure.
Course Assessments	Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.
Content Breakdown	Topics Coverage
Session 1 (Week 1)	1] Physics And Basic Electrical Components A. Conductors & Insulators, Static Electricity- Electric Field, Potential difference & Capacitance. Current Electricity – E.M.F., Ohm’s Law, Thermal Effects of Electrical Currents. Magnetism – Properties of Magnet, Electromagnetic Induction, Lenz’s Law B. Rheostat- Types, Potentiometer, Ammeter, Oscilloscope, Transformer-Types, Capacitor, Inductor, Thermionic Valves, Transistors, - Level 2- Pulse Generator – Astable Multivibrator C. Mains Supply – Fuse, Plug, Switch, Wiring of the house, Dynamo. Shock – Types, Effects, Precaution & Treatment 2] Cellular Biophysics Reception & Emission of E.M.F. signals
Session 2 (Week 2)	3] E.M. spectrum Wavelength, Velocity & Frequency. Laws governing Radiation. 4] Fundamentals of Low frequency currents i] Types of Currents-applications in brief ii] Characteristics of Currents – Pulse- Types of Pulses, Phase, Waveform, Interpulse interval & Frequency lii] Polarity testing iv] Types of electrodes, Galvanic Skin Resistance –Significance & Methods to reduce GSR
Session 3 (Week 3)	5] Fundamentals of Medium frequency currents Physical Principles, Components of Panel, Testing of ApparatusInterferential Therapy, - Level 2- Russian currents 6] Fundamentals of High frequency currents— i] Pulse Generator, Circuit of Short Wave Diathermy & Ultrasound Machine ii] Physical Principles, Components of Panel, Testing of Apparatus– Continuous & Pulsed Short Wave Diathermy, Ultrasound, Ultra Violet Rays, LASER (Only Physical Principles & Types) iii] Hazards of environmental currents
Session 4 (Week 4)	7] Biophysics of Superficial heat Physical principles, components of panel, Physiological effects, Therapeutic Effects /uses, Merits & Demerits, Indications & Contra-indications, Skills of Application in- 12 i] Paraffin wax bath, ii] Whirl Pool, iii] Contrast bath iv] Hydro-collator / Hot packs v] Infra Red vi] Home remedies
Session 5 (Week 5)	8] Direct current (Constant) – Polarity Testing, Physiological & Therapeutic Effects Of D.C.& Safety measures, - Level 2: Cathode /Anodal Galvanism, Iontophoresis using various ions & pharmacotherapeutic drugs- Effects & concentration of Ions, Tap water Iontophoresis
Session 6 (Week 6)	9] Low Frequency CurrentsPhysiological& Therapeutic Effects/ Uses of Faradic-type Current, Techniques Of Application Interrupted Direct Current – Pulse Duration & Type of Pulse, Physiological & Therapeutic Effects/ Uses of Interrupted D.C., Technique of Application, Definition & Stimulation of Motor Points on Models T.N.S.-
Session 7 (Week 7)	10] Medium Frequency CurrentsElectro Physiological Effects & Uses, Contra Indications, Techniques of Application, Endovac attachment, Advantage of I.F.T. over low frequency currents - Level 2: Russian current



Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9) Session 14 (Week 14)	11] Electro Magnetic Fields Production of Heat, S.W.D.-Continuous/Pulsed, Physiological Effects & therapeutic effects, Contraindications, Techniques of Application, Types of Electrodes. - Level 3: Long Wave Diathermy 12] Therapeutic Ultra Sound-pulsed/continuous, Physiological Effects & therapeutic effects, Contra Indications, Techniques of Application - Level 2: Dosimetry 13] Ultra Violet Rays Types of UVR, Physiological & Therapeutic Effects, Contra Indications, Test dose, Local & General Applications 14] Laser Properties, Types of Cold Laser, Physiological & Therapeutic Effects, Contra Indications
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Research Methodology

1	Course name	Research Methodology
2	Course Code	PT303
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	2
5	Educational hours	2
6	Pre-requisite requirements	All 1 st & 2 nd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022



Brief Description:	This course advances the student's understanding of health-related research methods and concepts. The course will explore human research ethics, qualitative research methods, and quantitative research methods. Students will read and critique both qualitative and quantitative published research.
Textbooks required for this Course:	1] Methods in Biostatistics - B.K. Mahajan 2] Research for Physiotherapists, project design & Analysis- Hicks, Carolyn D.M. 3] Foundations of clinical research: Applications to practices – L.G. Portney 4] Research Methodology - Methods & Techniques – C.R. Kothar.
Course Duration	28 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities.
Course Objectives:	On successful completion of the course students will be able to: 1. Describe ethical considerations pertaining to human research, and be able to apply knowledge of research ethics principles and processes to their own research proposal 2. Compare and contrast the similarities and differences between common qualitative, quantitative and mixed methods research methodologies 3. Evaluate the appropriateness of common qualitative, quantitative and mixed methods research methodologies and research design issues, both from a theoretical principles and applied construct 4. Recognise the differences between research questions and a testable hypothesis relevant to their discipline of study, and demonstrate understanding of the differences based on critical appraisal of current literature. 5. Further develop critical appraisal skills for both qualitative, quantitative and mixed methods research.
Course Assessments	Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.
Content Breakdown	Topics Coverage
Session 1 (Week 1)	Topicstobecoveredinthesession (week): • Meaning of Research, Research Approaches, Significance of Research, Research Process, Criteria of Good Research
Session 2 (Week 2)	Assignment1handedout Topicstobecoveredinthesession (week) •Defining the Research Problem, Selecting the Research Problem, Necessity & Technique in defining the problem. Research Design: Developing a Research Plan.
Session 3 (Week 3)	Topics to be covered in the session (week) •Data Collection: Collection of primary data, observation method, interview method
Session 4 (Week 4)	Geriatric Conditions • Data Collection: data through questionnaires & schedules, collection of secondary data
Session 5 (Week 5)	Topicstobecoveredinthesession (week) •Data Collection: selection of appropriate method of data collection, guidelines for developing questionnaire,
Session 6 (Week 6)	Topicstobecoveredinthesession (week) •Data Collection: Survey vs. Experimental method



Session 7 (Week 7)	Topics to be covered in this session (week) Processing & Analysis of data: Data analysis, Statistics
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9) Session 14 (Week 14)	Topics to be covered in this session (week) <ul style="list-style-type: none"> • Processing & Analysis of data: measures of central tendency, Dispersion, Asymmetry, Relationship, and Regression Analysis • Testing of Hypothesis: Parametric tests, Non Parametric tests (Distribution free tests), Design & Analysis of Experiments. • Ethical Concepts in Research • Role of Computer in Research
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Therapeutic Testing & Measurement

1	Course name	Therapeutic testing & measurement
2	Course Code	PT205
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	All 1 st subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:

Effective measurement of clinical outcomes is dependent on reliable outcome instruments. Measurement error and reliability testing are



	fundamental underpinnings of reliability. This article defines and illustrates sources of measurement error, outlines strategies for error minimization, and gives an overview of the types of reliability studies
Textbooks required for this Course:	Barrow, H. M., & McGhee, R. (1997). A practical approach to measurement in physical education. Philadelphia: Lea and Febiger .Kansal, D.K. (1996). Test and measurement in sports and physical education. New Delhi: D.V.S. Publications. Mathews, D.K., (1973). Measurement in physical education, Philadelphia: W.B. Saunders Compnay. Phillips, D. A., & Hornak, J. E. (1979). Measurement and evaluation in physical education. New York: John Willey and Sons.
Course Duration	56 hours
Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	The student should be able to: 1. Use the appropriate measurement physiotherapy tool during the assessment process. 2. Use the appropriate measurement physiotherapy tool during the re-assessment process. 3. practice all the previous using an evidence-based practice protocol
Course Assessments	Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.
Content Breakdown	Topics Coverage
Session 1 (Week 1)	Introduction to Test, Measurement & Evaluation • Meaning of Test, Measurement & Evaluation in Physical Education • Need & Importance of Test, Measurement & Evaluation in Physical Education • Principles of Evaluation Unit-II Criteria: Classification and Administration of test.
Session 2 (Week 2)	• Criteria of good Test • Criteria for selection of a tests, scientific authenticity (reliability, objectivity, validity and availability of norms), Economy of tests,
Session 3 (Week 3)	Type and classification of Test • Administration of test, advance preparation–Duties during testing–Duties after testing. Unit- III Physical Fitness,
Session 4 (Week 4)	AAHPER youth fitness test, • JCR test, Indiana Motor Fitness Test
Session 5 (Week 5)	Methney & Johnson General motor Educability test
Session 6 (Week 6)	Unit- IV Sports Skill Tests • Lockhart & McPherson badminton test, Miller wall volley test
Session 7 (Week 7)	• Johnson basketball test, Knox test McDonald soccer test,
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9) Session 14 (Week 14)	Motor Fitness & General motor Educability Tests & Other Tests • Brady volleyball test, Russel Lange volleyball test • Harbans Singh Hockey test • Henry Friedel Field Hockey test • Kraus-Weber muscular test. • Stork Balance Test



	<ul style="list-style-type: none"> • Yo-Yo Test • Johnson soccer test
(Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.

Physiotherapy for Internal Medicine

1	Course name	Physiotherapy for Internal medicine
2	Course Code	PT305
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	All 1 st & 2 nd subjects to pass max. 2 subjects for reset.
7	Program offered the course	Physiotherapy Department
8	Instruction Language	English
9	Date of course approval	2022

Brief Description:	This course must promote the capability of the student to describe Etiology, Pathophysiology, Signs & Symptoms & Management of the various Endocrinal, Metabolic, Geriatric & Nutrition Deficiency conditions
Textbooks required for this Course:	1. Outline of Fractures 8th edition - Adams 2. Outline of Orthopedics 8th edition - Adams 3. System of Ortho - Apley 4. Essentials of Orthopedics for Physiotherapists- John Ebnezar 5. Essential Orthopedics – Maheshwari. 6. Mercer's Orthopedic Surgery- Duthie, R.B. & Bently G
Course Duration	56 hours



Delivery	Lecture-based, Group interaction and discussion, self-directed activities, Laboratory experiments.
Course Objectives:	<p>Upon completion of this course, the student will have reliably demonstrated the ability to:</p> <ul style="list-style-type: none"> • Demonstrate knowledge, clinical and technical skills and decision-making capabilities pertinent • management of patients with medical problems • Evaluate and manage common medical conditions in order to provide appropriate preoperative care to surgical patients who happen to have medical co-morbidities
Course Assessments	<p>Assignment1: 30%. Assignment2:10% Final Exam: 60% 60 % is required for a pass in this course.</p>
Content Breakdown	Topics Coverage
Session 1 (Week 1)	<p>Topics to be covered in the session (week):</p> <p>i) Diabetes. ii) Thyroid. iii) Calcium Metabolism, Disorders of Cerebellar function,</p>
Session 2 (Week 2)	<p>Assignment 1 handed out</p> <p>Topics to be covered in the session (week)</p> <p>pituitary & Adrenal conditions, Epilepsy, Tetanus, Disorders of Cranial Nerves & Special Senses</p>
Session 3 (Week 3)	<p>Topics to be covered in the session (week)</p> <ul style="list-style-type: none"> • Degenerative / Rheumatological Conditions: i) Rheumatoid Arthritis, ii) Osteo Arthritis
Session 4 (Week 4)	<p>Geriatric Conditions</p> <p>i) Aging Process, ii) Osteoporosis</p> <p>iii) General Health Care, Wellness clinic, Alzheimer's disease</p>
Session 5 (Week 5)	<p>Topics to be covered in the session (week)</p> <ul style="list-style-type: none"> • Nutrition Deficiency Diseases, Drug Abuse / Intoxication / HIV
Session 6 (Week 6)	<p>Topics to be covered in the session (week)</p> <ul style="list-style-type: none"> • Geriatric Conditions, i) Aging Process, ii) Osteoporosis, iii) General Health Care, Wellness clinic, Alzheimer's disease.
Session 7 (Week 7)	<p>Topics to be covered in the session (week)</p> <p>Cerebro-vascular accidents – Thrombosis, Embolism, Haemorrhage, Extra Pyramidal lesions – Basal Ganglia, Parkinsonism</p>
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9)- Session 14 (Week 14)	<p>Topics to be covered in the session (week)</p> <p>Evaluation & presentation of Two cases Each in i) U.M.N.lesion. ii) L.M.N.lesion</p> <p>iii) Respiratory Condition. iv) Cardio Vascular Condition</p>
Session 16 (Week 16)	Final Exam
Attendance Expectations	<p>Students are expected to attend every session of class, arriving on time, returning from breaks promptly and remaining until class is dismissed.</p> <p>Absences are permitted only for medical reasons and must be supported with a doctor's note.</p>
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives,



	including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. Timetable may also be revised.



6- قسم الصحة العامة



Anatomy

1	Course name	Anatomy
2	Course Code	PH202
3	Course type: general/specialty/optional	Specialty
4	Accredited units	3
5	Educational hours	4
6	Pre-requisite requirements	General Microbiology
7	Program offered the course	Public Health
8	Instruction Language	English
9	Date of course approval	2022
Brief Description:		<p>anatomy is a field in the biological sciences concerned with the identification and description of the body structures of living things. Gross anatomy involves the study of major body structures by dissection and observation and in its narrowest sense is concerned only with the human body. "Gross anatomy" customarily refers to the study of those body structures large enough to be examined without the help of magnifying devices. In contrast, microscopic anatomy is concerned with the study of structural units small enough to be seen only with a light microscope. Dissection is fundamental to all anatomical research. The Greeks made the earliest record of its use, and Theophrastus called dissection "anatomy," from ana temnein, meaning "to cut up."</p> <p>Comparative anatomy, the other major subdivision of the field, compares similar body structures in different species of animals in order to understand the adaptive changes they have undergone in the course of evolution.</p>
Textbooks required for this Course:		<p>Book Title & AITBS: Anatomy and Physiology</p> <p>Additional Resources: 1st addition</p>
Course Duration		56 / hours
Delivery		Group interaction and discussion during the lecture and practical programs by visual projectors, laboratories and classrooms.
Course Objectives:		<p>The student should be able to:</p> <ol style="list-style-type: none"> Describe the general structure of a bone and list the functions of its parts. Distinguish between intramembranous and endochondral bones and explain how such bones develop and grow. Describe how connective tissue is included in the structure of skeletal muscle Name four types of neurological cells and describe the functions of each. Distinguish between endocrine and exocrine glands. Name the organs of the urinary system and list their general functions. Name the parts of the male reproductive system and describe the general functions of each part. List the general functions of the respiratory system.



Course Assessments	Assignment 1: 40% Final Exam: 60% 60 % is required for a pass in this cours
Content Breakdown	Topical Coverage
Session 1 (Week 1)	Introduction to anatomy
Session 2 (Week 2)	Systematic of anatomy
Session 3 (Week 3)	- systems and part of body -directional of anatomy
Session 4 (Week 4)	- organization of the body
Session 5 (Week 5)	- skeletal system
Session 6 (Week 6)	- muscular system
Session 7 (Week 7)	- respiratory system
Session 8 (Week 8)	Midterm Exam
Session 9 (Week 9)	- digestive system
Session 10 (Week 10)	- Cardiovascular system
Session 11 (Week 11)	- excretory system
Session 12 (Week 12)	- nervous system
Session 13 (Week 13)	- endocrine system
Session 14 (Week 14)	- reproductive system
Session 15 (Week 15)	- senses of organ
Session 16 (Week 16)	Final Exam
Attendance Expectations	Students are expected to attend every session of class, arrive on time, return from breaks promptly, and remain until class is dismissed. Absences are permitted only for medical reasons and must be supported with a doctor's note.
Generic Skills	The faculty is committed to ensuring that students have the full range of knowledge and skills required for full participation in all aspects of their lives, including skills enabling them to be life-long learners. To ensure graduates have this preparation, such generic skills as literacy and numeric, computer, interpersonal communications, and critical thinking skills will be embedded in all courses.
Course Change	Information contained in this course outline is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational employment and marketing needs. The instructor will endeavor to provide notice of changes to students as soon as possible. The timetable may also be revised.

Physiology

1	Course name	Physiology
2	Course Code	PH202
3	Course type: /general/specialty/optional	Specialty
4	Accredited units	
5	Educational hours	

