Course Description

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Introduction

According to an increasing population, quality of medical health service and treatment, necessity and needs to non-pharmacological treatment is felt. According to World Health Organization (WHO) about %10 of people in each country have a type of disability. Spreading and vast of population across the country, a lack of educated physical therapists are obvious. So a bachelor degree in Physiotherapy created in the universities.

These course syllabi and disruption created by studying education courses in the accredited universities in 35 countries and studying recommendation of well-known specialist and thinkers.

Definition

Physiotherapy is a branch of Rehabilitation sciences which graduates in it with effective Communication with patients try to assess and diagnosis the disabilities. Also, with the application of physical factors such as light, electricity, heat, and…) and mechanical elements such as (practices and different therapeutic movements) solve this problem.

History and New Developments:

Physiotherapy history in world:
For a long time, human try to treat different diseases and their effects by using natural and physical phenomena. For example, mineral waters were applied for therapeutic purposes in Japan in 3000 B.C. Also, in classic medicine in Iran different physical factors were applied for treatment.

After the first World War, which great application of destructive weapons led to a lot of damages and disabilities, rehabilitation and specially physiotherapy were considered. Todays, with different scientific and technical improvement in medicine, physiotherapy as a branch of medical science was investigated and educated in the most universities in the world.
History of Physiotherapy in Iran:
The first modern physiotherapy in Iran referred to 85 years ago. After that, at
1941, a physician allocated a place in his office for physical treatments. In the late
of 1950 decade, the first modern Physiotherapy center launched in a charity clinic.
Todays, different physiotherapy centers are established in all over the country.
In the first 1960 decade, the first educational physiotherapy center with the name
of high physiotherapy institute established by the World Health Organization
(WHO) in Iran. Now, different educational centers in our country accept students
in B. Sc and some of them accept students in M.Sc and Ph.D degrees. The first
graduated student in Ph.D degree in physiotherapy graduated in 2001 from
Tarbiat Modarres University.
Todays, the increasing the population, industry development leads to increase
different damages and disabilities. With this problem, need to Physiotherapy is felt
perfectly. With Physiotherapy treatments can make up many disabilities. Also,
with giving suitable information can prevent physical and movement damages or
reduce their improvement.

Values and Beliefs:
Physiotherapy is one of special rehabilitation services which try to restore health
to the society. Graduates Along with technological growth and increasing the
human needs with Holistic and Community Oriented insight, try to coordinate
patients with environment and society and educate them for prevention the
physical disorders.

Mission:
Physiotherapists apply different approaches to solve treatment and consultative
patient needs. They need to have continuous contact with other research and
educational centers to update their knowledge.
Vision:  
We expect to reach the first level of world with efforts of our physiotherapists.

Aims:  
The main aim of B.Sc in physiotherapy is to educate students with the ability:  
- To assess, recognizing the problems and doing physiotherapy exercises  
- To assess and diagnose the problems and give physiotherapy services  
- Ability to give services to prevent physical disorders  
- Try to introduce this field

Roles:  
- Physiotherapy treatment under medical supervision  
- Educational  
- Research

Duration of the degree and system:  
The duration of B.Sc in Physiotherapy is four years of full time study. Students must accept in national entrance exam for B.Sc Degree and must pass 130 credits total, including 22 credit general courses, 43 credits specific courses, 41 credits basic courses and 24 credits of clinical internship. Courses are presented in theoretical, practical, theoretical/ practical and clinical practice formats. Each theoretical credit is 17 hours and practical credit is 34 hours and clinical practice is 68 hours.
Course Title: Physics for physiotherapy  
Course Number: 217245300  
Course Type: □General  ✔Basic  □Main  
Prerequisite Title (s): None

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Course Description:

This course deals with fundamental aspects of mechanics, energy, work, momentum, sound and ultrasound, fluid mechanics, heat & fundamental aspects of Electronics and Electricity.

General objective of the course:

The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge and skills in different aspects of mechanics and physics with more emphasis on areas that related to physical therapy.

Course syllabus:

A- Theory:

- Principles of measurements, unit system, vector calculation.
- Laws of Newton in dynamics
- Simple machine
- Work and energy, Momentum, forces and stability
- Principles of mechanics in vibrations, waves, sounds and ultrasound.
- Fluid mechanics (Pascal, Archimedes Bernoulli’s laws)
- Heat, including but not limited to the following subjects;
- Temperature and its measurement devices. Heat transfer fluid in.
Course Description

- Electricity including but not restricted to the following topics;
- Static Electricity. Electrical current (Direct and Alternative), their thermal effects, Capacitor and its application.
- Magnetic Fields; inductive (Faradic), Electrical circuits, resonance in circuit.
- Wave properties of particles & Electromagnetic waves,
- Photo-electric effect, light quantum theory, x-ray and its properties.

B- Practice in Laboratory.

Course Title: General Physiology
Course Number: 21723815
Course Description:

This course deals with fundamental aspects of Physiology, cell structure and function, including but not limited to the cardiopulmonary and integumentary system.

General objective:

The aim of this class is to offer the students opportunities to acquire basic knowledge in physiology and cellular office.

Course syllabus:

A- Theory:

- Including cell structure, cell functions, introduction to physiology.
- Physiology of intracellular fluid and lymphatic, blood and blood circulation system.
- Physiology of urinary and excretion system.
- Physiology of cardiopulmonary and respiratory system.
- Physiology of digestive system.
- Physiology of integumentary and sensation.
- Physiology of fluid balance and electrolytes, reproductive system, endocrine gland and body temperature regulation system.
- Physiology of peripheral and central system.
- Physiology of musculoskeletal system.
Course Description

B- Practice in Laboratory
Course Title: Muscle and Nerve Physiology
Course Number: 217297300
Course Type: □General ✔Basic □Main
Prerequisite Title (s): None

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Course Description:
Physiology of Central Nervous System and Muscle
The aim of this class is to offer the students opportunities to acquire basic and fundamental knowledge regarding muscle and nerve physiology.
Course Title: Anatomy I (Head, Neck&Trunk)
Course Number: 217240800
Course Type: □ General ☑ Basic □ Main
Prerequisite Title (s): None

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Course Description:
This course deals with putting in basic and rudimentary aspects of Anatomy of head, neck and trunk including spine and rib cage.

General objective:
The purpose of this course is to provide the students the opportunities to acquire basic knowledge and skills in head, neck as well as trunk and spine Anatomy.

Course syllabus:
A- Theory:
- Osteology of the head, neck, trunk and spine.
- Myology, including description of muscular attachments (origin and insertion) and their direction.
- Nerve distribution in the areas of head, neck, trunk and spine.
- Types of joints and their function.
- Ligaments and Tendons.
- Vascular network, including Arteries, Veins and Lymphatic system.
- Intervertebral discs.

B- Practice in laboratory (observation and practice on cadaver).

Course Title: Anatomy II (Shoulder Girdle&Upper Extremities)
Course Description

Course Number: 217151000
Course Type: □ General (Basic □ Main
Prerequisite Title (s): None

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Course Description:

This course deals with advanced and detailed aspects of the upper extremity anatomy.

General objective:

The purpose of this course is to provide the students the opportunities to acquire advanced knowledge and skills in upper extremity anatomy.

Course syllabus:

A- Theory:

- Osteology of the upper extremities in details.
- Myology, including description of muscular attachments (origin and insertion) and their direction.
- Nerve supply in upper extremities, including distribution of the major nerves as well as detailed branch outs and innervations.
- Types of joints and their function.
- Ligaments and Tendons of upper extremities.
- Vascular network, including Arteries, Veins and Lymphatic system.

B- Practice in laboratory (observation and practice on cadaver).
Course Description:

Course Title: Anatomy III (pelvic & Lower Extrmites)
Course Number: 217216800
Course Type: □ General  ☑ Basic  □ Main
Prerequisite Title (s): None

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Course Description:

This course deals with advanced and detailed aspects of lower extremity anatomy.

General objective:

The purpose of this course is to provide the students the opportunities to acquire advanced knowledge and skills in lower extremity anatomy.

Course syllabus:

A- Theory:

- Osteology of lower extremities in details.
- Myology, including description of muscular attachments (origin and insertion) and their direction.
- Nerve supply in lower extremities, including distribution of the major nerves as well as detailed branch outs and innervations.
- Types of joints and their function.
- Ligaments and Tendon of lower extremities.
- Vascular network, including arteries, veins and lymphatic system.

B- Practice in laboratory (observation and practice on cadaver)

Course Title: NeuroAnatomy
Course Number: 217395700
Course Description

Course Type: □ General  ✔ Basic  □ Main
Prerequisite Title (s): Anatomy I, II, III

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Course Description:
This course deals with the anatomy of central and Peripheral nervous systems. This also includes autonomic nervous system.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge regarding neuro-anatomy.

Course syllabus:
- Central nervous system
  - Cerebrum (gray matter, white matter), Thalamus, Cerebellum, Mid brain, Pons, Medulla oblongata, Ventricles, Brain stem, Basal ganglia, extra pyramidal system.
  - Spinal cord
    - Cranial nerves, Spinal nerves and plexus
- Peripheral nervous system
- Autonomic nervous system
Course Title: Anatomy IV (Surface, Clinical & Functional)
Course Number: 217481000
Course Type: □ General (Basic □ Main
Prerequisite Title (s): Anatomy I, II& III

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Course Description:
This course deals with advanced and detailed aspects of defining landmarks.

General Objective of the Course:
The purpose of this course is to provide the students opportunities to acquire advanced knowledge and skills in upper/lower and trunk surface anatomy.

Course Syllabus:

A- Theory:
- Defining thorax landmarks of the thorax: ribs and stern lungs and diaphragm.
- Defining the landmarks of viscera.
- Defining the landmarks of upper and lower.

B- Practice in laboratory:
**Course Description**

Course Title: Histology  
Course Number: 217232200  
Course Type: □General  ✔Basic  □Main  
Prerequisite Title (s): None

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Course Description:

This course deals with fundamental aspects of history with more emphasis on musculoskeletal. Neuromuscular, cardiopulmonary and integumentary systems.

General objective of the course:

The purpose of this course is to provide the students opportunities to acquire basic knowledge in histology and cellular structure.

Course syllabus:

A: Theory:

- Cytology
- Study of different kinds of tissues from histological points of view including:
  - Muscular, Nervous, Osseous, Cartilaginous, Epithelial, Glandular, Connective & Blood tissues.

B: Practice in laboratory.
Course Title: Pathology  
Course Number: 217391200  
Course Type: □ General  ☑ Basic  □ Main  
Prerequisite Title(s): None  

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Course Description:  
This course deals with fundamental aspects of pathology: cellular pathology and dysfunction with more emphasis on the pathology of the musculoskeletal nervous system. Cardiovascular, respiratory and connective tissue pathology.

General objective of the course:  
The purpose of this course is to provide the students opportunities to acquire basic knowledge in pathology and cellular dysfunctions.

Course syllabus:  
- General pathology.
- Cellular pathology.
- Pathology of inflammation, edema coagulation necrosis etc.
- Pathology of cardiovascular and cardiopulmonary system.
- Pathology of musculoskeletal and neuromuscular system.
- Pathology of connective tissue and integumentary system.
Course Title: General & Handicaps Psychology
Course Number: 217255700
Course Type: □ General    ☑ Basic    □ Main
Prerequisite Title (s): None

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Course Description:
This course deals with fundamental aspects of psychology, different school of thought and points of view in psychology. This also includes a mental status in normal and abnormal conditions.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge and attitudes toward understanding fundamental aspects of psychology.

Course syllabus:
- Definition, history, nature of psychology.
- Different school of thought and points of view in psychology
- Cognition
- Psychology of religions and prophets point of view.
- Psychological divisions: Basic facts on experimentation, development and maturity, child development, personality, mental deficiency and learning psychology.
- Individual differences and various types of intelligence tests and different rules and regulations for studying it.
- Motivation and emotion and related nervous mechanism.
- Drives, aggression, frustration and various defense mechanisms.
## Course Description

- Learning process, kinds of learning, perceptions and their difference.
- Expressions
- General psychological aspects of disorders to normal and abnormal behavior.
- General psychological aspects of mental disorders accompany brain damage.
- General psychological aspects of mental status in normal and abnormal situation.
- Psychology of physical disability and handicapped in various types and from different points of view.
Course Title: Psychiatry  
Course Number: 217397500  
Course Type: □ General  ☑ Basic  □ Main  
Prerequisite Title (s): Psychology  

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Course Description:  
This course deals with fundamental aspects of psychiatry, different psychiatric disorders and the way for prevention of them.

General objective of the course:  
The purpose of this course is to provide the students opportunities to acquire basic knowledge and attitudes toward understanding fundamental aspects of psychology.

Course syllabus:
- Définition & a brief history of psychiatry
- The cause of mental illness
- Clinical syndromes
- The major psychoses
- The neuroses and personality disorders
- Organic states
- Psychosomatic illness
- Drug addictions and abuse
- Fundamental of treatment
- Brain mechanism and behavior

The biological basis of psychoanalysis
Course Title: Genetics

Course Number: 217396600
Course Type: □General ☑Basic □Main
Prerequisite Title (s): None

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Course Description:
This course deals with fundamental aspects of Genetics: DNA structure, replication and synthesis gene regulation, chromosomal analysis.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge of genetics.

Course syllabus:
- Cell structure
- DNA structure, DNA replication, DNA synthesis.
- Gene regulations.
- Principles of chromosomal analysis and karyotype.
- Genetic counseling.
- Pharmacogenetics prenatal diagnosis.
- Immunogenetics and genetic disease.
- Molecular genetics in medicine.
- Mendel’s experience and Mendel's law.
Course Description

- Pattern of inheritance of monogenic dominant.
- Recessive and sex-linked trails.
- Sex cremation.
- Lyan hypothesis.
Course Title: Neurology  
Course Number: 217340100  
Course Type: ☑General ☐Main  
Prerequisite Title (s): None

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Course Description:  
This course deals with fundamental aspects of neurology.

General objective of the course:  
The purpose of this course is to provide the students the opportunities to acquire basic and fundamental knowledge in neurology.

Course syllabus:  
- Preface and introduction of neurology.  
- Clinical study of neurological patients.  
- Motor, sensory and reflex assessments.  
- General items related to cerebro-spinal fluid, and lumber puncture.  
- Epilepsy and its different types,  
- Brain humors, glopma, abscess, hematoma infection.  
- General items related to cerebrovascular disorders, trauma and their out coming result.  
- Headaches.  
- Different kinds of paralysis caused by upper and lower motor neuron lesions and comparison of their clinical symptoms.  
- Abnormal tones, reflexes and movements (tremor, athetoid, chorea, hemibalismus).  
- Variations in muscle tone in pyramidal and extrapyramidal syndromes, balance disorders, sensory disorders, different kinds of
senses and sensory tests. Assessment of paresthesia caused by neuropathy.

- Sensory disorders caused by spinal cord injuries.
- Spinal degenerative disease, multiple sclerosis.
- General items related to speech disorders.
- Peripheral nervous system disorders and diseases, neuritis, neuropathies, lesions of peripheral nerves.
- General explanation about cranial nerves and their involvement and detailed description of seventh cranial nerve lesions.
- Central nervous system infections (viral infections, syphilis, meningitis, encephalitis, poliomyelitis.
- Developmental anomalies (cerebrum and spinal cord).
Course Title: Cardiovasculo-pulmonary Diseases
Course Number: 217495000
Course Type: □ General  ☑ Basic  □ Main
Prerequisite Title(s): Psychology

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Course description:
This course deals with cardiopulmonary and cardiovascular physiology and diseases. This also includes circulatory problems, digestive and urogenital system conditions, as well covers pediatric conditions.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge of internal medicine with more emphasis on cardiopulmonary, cardiovascular digestive and urogenital system and pediatrics conditions and diseases.

Course syllabus:
- Anatomy, physiology and Mechanics of cardiovascular & respiratory system.
- Patient evaluation in cardiopulmonary and cardiovascular diseases.
- Examination including clinical and Para clinical.
- Respiratory diseases (kinds, etiology, sign and symptoms)
- Cardiovascular diseases (kinds, etiology, sign and symptoms)
- Digestive system conditions and diseases
- Urogenital system conditions and diseases.
- Pediatrics conditions and diseases.

Course Title: Skin and Rheumatologic Diseases
Course Description

Course Number: 217233000
Course Type: □ General  ☑ Basic  □ Main
Prerequisite Title (s): None

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Course description:
This course deals with rheumatologic and dermatologist (integumentary) diseases.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge of internal medicine with a concentration on Rheumatologic and Dermatological conditions and diseases.

Course syllabus:
- Rheumatoid diseases.
- Septic arthritis.
- Osteoarthritis.
- Rheumatoid arthritis.
- Collagen and dermatology diseases.
- Ankylosing spondylitis.
- Non – arthropathic rheumatism.
- Gout.
- Pseudo gout.

Course Title: General Surgery
Course Number: 217229800  
Course Type: □General  ☑Basic  □Main  
Prerequisite Title (s): None  

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Course description:  
This course deals with common surgeries and complications that physical therapist deals with those after surgery.  

General objective of the course:  
The purpose of this course is to provide the students opportunities to acquire basic knowledge regarding common complications after surgery.  

Course syllabus:  
- Common complications after surgeries (general)  
- Common complications after gynecologic surgeries.  
- Common complications after neurosurgery.  
- Common complications after spinal cord and soft tissue lesions and surgeries.  
- Common complications after thoracic surgeries.  
Surgeries and common complications of conditions such as tumors, burns, and wounds.
Course Title: Orthopedics
Course Number: 217336000
Course Type: □General  ✓Basic  □Main
Prerequisite Title (s): Anatomy I, II, III

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Course description:
This course deals basic and fundamental aspects of orthopedic conditions, injuries and diseases. This also includes various types of surgeries such as amputations and different kinds of management in fractures and dislocations.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge in orthopedics.

Course syllabus:
- General items related to the structure and kinds of bones, joint, muscles and soft tissues.
- Congenital malformations of vertebral column.
- Congenital malformations of extremities.
- Dislocations and their complications and management.
- Fractures and their complications and management.
- Bone diseases such as metabolic, infectious and etc.
- Bone diseases caused by endocrine system deficiency.
- Tumors.
- Joint & Muscular diseases.
- Tendon and ligament injuries.
- Amputations.
Course Title: Radiology
Course Number: 217337800
Course Type: □ General    □ Basic    □ Main
Prerequisite Title (s): Anatomy I, II, III

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Course description:
This course deals with basic and fundamental aspects of radiology. This also includes radiological diagnosis of various diseases and conditions.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge and skills in radiology and radiological diagnosis of various diseases and conditions.

Course syllabus:
- Definitions of radiology terms.
- Properties and application of radiation (x-ray)
- Positioning in radiology.
- Different types of radiography.
- Radiological signs of disorders and diseases, including but not limited to:
  - Tumors, Metabolic diseases of bone and joint, Rheumatic diseases, Osteoarthritis, Bony disorders caused by blood circulation deficiency, Deformities of extremities, Deformities of vertebral column, Vertebral column disorders and diseases, Radiological diagnosis of fractures.
Course Title: First Aides & Emergencies  
Course Number: 217271100  
Course Type: □General  ☑Basic  □Main  
Prerequisite Title (s): None

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DESCRIPTION

First aid at the pre-hospital stage, intensive therapy in various types of shock and comatose states.  
Emergency services in various diseases and conditions such as: cardiovascular system, respiratory system, nervous system, digestive organs, urogenital system, obstetrics and gynecology, infectious disease.  
Emergency services in accidents and traumatic injuries.  
Injuries of musculoskeletal, locomotors and weight bearing organs.  
Abdominal, Skull and brain injuries.  
Burns and thermal injuries.  
Acute poisoning and bites of venomous animals and insects.  
Pediatric emergency services.  
Airway clearance techniques and cardiopulmonary resuscitation.  
Required medicines at home.  
Practice in the class.
Course Title: Advance English & Medical Terminology  
Course Number: 217228100  
Course Type: □General    □Basic    ☑Main  
Prerequisite Title (s): General English

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**DESCRIPTION**

This course is designed to provide study practical application of medical vocabulary according to body systems.  
Basic construction of medical words.  
Word origins and roots.  
Prefix and suffixes.  
Specialized language abbreviation, acronyms, synonyms and symbols.  
Body systems, laboratory tests, radiology and other diagnostic and therapeutic procedures and diseases.
Course Title: Principles of Rehabilitation and Physical Therapy  
Course Number: 217123400  
Course Type: □ General  □ Basic  ☑ Main  
Prerequisite Title(s): None  

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**DESCRIPTION**

Definition of disabled & disabilities, rehabilitation, physical therapy.
History of rehabilitation, physical therapy, team work rehabilitation & the role of physical therapy in the multidisciplinary team and health care system, communication between physical therapist and clients and other medical and rehabilitation teams.
Standards, legal and ethical aspects of physical therapy, professional behaviors and touch in physiotherapy, dress code, principals of administration, roles and responsibilities of physical therapists.
Physical therapy settings, categorizing diseases and disabilities which physical therapists can participate in their treatment and rehabilitation.
Principles of primary physical examination: Introduction to a physical therapy program, considered courses & skills which student is expected to acquire.
Introduction to physical therapy intervention methods included:
Electrotherapy: instruments, methods, indications and contraindications.
Mechanotherapy: instruments, methods of therapeutic exercises, outline on treatment of various methods and Hydrotherapy: instruments, water properties, indications and contraindications.
Please refer to Management of Physical Therapy.
Course Description

Course Title: Neurologic Physical Therapy
Course Number: 217497700
Course Type:  □General    □Basic  ☑Main
Prerequisite Title(s): Neurology

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Course description:
This course deals with indication of physical therapy in neurological conditions that includes complete and detailed evaluation and management of neurological and neuromuscular conditions.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge, skills and attitudes, relevant to the evaluation examine administration and the interventions of neurological and neuromuscular conditions.

Course syllabus:
- Indication of physical therapy in neurological and neuromuscular conditions.
- Examination and evaluation of neurological patients.
- Classification of neurological disorders.
- Principles of physical therapy in nervous and neuromuscular system.
- Principles of physical therapy evaluation and management in central nervous system, such as: Hemiplegia, Trauma, Spinal cord injuries, Spina-bifida, Cerebral palsy, Parkinson’s, Viral infections,
- Principles of physical therapy evaluation and management in the peripheral nervous system, such as: Neuritis, Peripheral nerve disorders and lesions.
- Principles of physical therapy evaluation and management in neuromuscular conditions.
Course Description

Principles of physical therapy evaluation and management in psychopathic disorders.
Course Title: Physiotherapy in Internal diseases I (cardio-pulmonary conditions)
Course Number: 217440300
Course Type: Main
Prerequisite Title (s): Internal Diseases I

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Course description:
This course deals with indication of physical therapy in cardiopulmonary conditions. This also includes detailed evaluation and management of vascular disorders, chest and core shape.

General objectives of the course:
The purpose of this course is to provide the student opportunities to acquire basic knowledge, skills and attitudes, relevant to the evaluation, examination, administrative and interventions of cardiopulmonary conditions.

Course syllabus:
- Review of Anatomy and physiology of cardio respiratory system.
- General items related to breaking exercise (aerobic capacity, external respiration, circulation, respiration an aerobic conditioning).
- Principles of physical therapy evaluation and intervention in respiratory condition and diseases, including but not restricted to:
  - Respiratory infections
  - Chronic bronchitis
  - Emphysema
  - Asthma
  - Pulmonary emboli
Course Title: Physiotherapy in Internal Diseases II (Skin and Rheumatology)
Course Number: 217442100

- Lung tumors
- Pleural diseases and etc.
- Principles of physical therapy evaluation and intervention in thoracic conditions and surgery.
- Principles of physical therapy evaluation and intervention in cardiovascular conditions and operations.
- Methods of endurance and aerobic conditioning exercises.
Course Description

Course Type: □ General   □ Basic   ☑ Main
Prerequisite Title(s): Skin and Rheumatologic Diseases

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Course description:
This course deals with indication of physical therapy in rheumatologic conditions that include complete and detailed evaluation and management of rheumatologic diseases.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge, skills and attitudes, relevant to the evaluation, administrative management and interventions of rheumatologic condition and diseases.

Course syllabus:
- Principles of physical therapy in rheumatologic conditions and diseases, including but not restricted to:
- Physical therapy evaluation and interventions in rheumatoid arthritis and juvenile rheumatoid (steel’s disease)
- Physical therapy evaluation and intervention in ankylosing spondylitis.
- Physical therapy evaluation and interventions in inflammatory arthritis, rheumatic fever and infections arthritis.
- Physical therapy evaluation and intervention in tuberculosis of bone.
- Physical therapy evaluation and intervention in osteomyelitis.
- Physical therapy evaluation and intervention in degenerative joint disease.

Course Title: Physiotherapy in Surgical Condition
Course Number: 217444800
Course Description

Course Type: □ General    □ Basic    ☑ Main
Prerequisite Title (s): General Surgery

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Course description:
This course deals with indication of physical therapy in surgical conditions. This also includes detailed evaluation and management in burn. Debridement, wound care and associated topics in integumentary system.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge. Skills and attitudes, relevant to evaluation, examination administration and interventions of surgical conditions and integumentary system.

Course syllabus:
- Common complication after surgeries.
- Physical therapy in general operation.
- Physical therapy in gynecology and related matters such as: normal and abnormal pregnancy and labor, therapeutic exercises during pregnancy and preparation for easy labor, labor positions, as well general regulations for gynecology and obstetrics wards.
- Physical therapy in neurosurgery (brain, spinal cord, and so on)
- Physical therapy in burn, debridement and wound care.
- Physical therapy in plastic and reconstructive surgery, Integumentary and soft tissue lesions and surgical procedure.
- Physical therapy in sport injuries
Course Description

- Physical therapy in dislocation, and touched on soft tissue lesions.
- Physical therapy in amputation.
Course Title: Orthopedic Physical Therapy (I)
Course Number: 217458800
Course Type: □General □Basic ☑Main
Prerequisite Title (s): Orthopedics

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Course description:

The course deals with indication of physical therapy in orthopedic condition. This also includes complete and detailed evaluation and intervention of musculoskeletal disorders.

General objective of the course:

The purpose of this course is to provide the students opportunities to acquire basic knowledge, skills and attitudes, relevant to the evaluation, examination, administration and interventions of orthopedic and musculoskeletal conditions of upper quadrant and upper extremities.

Course syllabus:

- Appraisal and evaluation of musculoskeletal disorders, including but not restricted to: Congenital, familial and acquired.
- Pathophysiology of joint lesions including but not restricted to: Dislocation, subluxation, fractures and intra articular derangements.
- Physical therapy in soft tissue lesions.
- Physical therapy in tumors.
- Physical therapy during the process of healing in musculoskeletal system.
- Physical therapy in grafts of tendons and muscle.
- Different school of thought in exercise therapy in musculoskeletal and orthopedic conditions.

Course Title: Orthopedic Physical Therapy (II)
Course Description

Course Number: 217458800
Course Type: □ General  □ Basic  ☑ Main
Prerequisite Title (s): Orthopedics

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Course description:
The course deals with indication of physical therapy in orthopedic condition. This also includes complete and detailed evaluation and intervention of musculoskeletal disorders.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge, skills and attitudes, relevant to the evaluation, examination, administration and interventions of orthopedic and musculoskeletal conditions of lower quadrant and lower extremities.

Course syllabus:
- Appraisal and evaluation of musculoskeletal disorders, including but not restricted to: Congenital, familial and acquired.
- Pathophysiology of joint lesions including but not restricted to: Dislocation, subluxation, fractures and intra articular derangements.
- Physical therapy in soft tissue lesions.
- Physical therapy in tumors.
- Physical therapy during the process of healing in musculoskeletal system.
- Physical therapy in grafts of tendons and muscle.

Different school of thought in exercise therapy in musculoskeletal and orthopedic conditions.
Course Title: Biomechanics & Kinesiology I (General & Upper limbs)
Course Number: 217318800
Course Type: □ General □ Basic ☑ Main
Prerequisite Title (s): Anatomy II (Shoulder Girdle & Upper Limbs)

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Course description:
The course deals with principles of kinesiology and mechanics in the human body, anatomic and physiologic basic of human motions. The course also deals with principles of kinesiology and mechanics in upper extremity that includes detailed study of motion analysis.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge in kinesiology and biomechanics of the upper extremity.

Course syllabus:
- General aspects in kinesiology and biomechanics.
- Mechanical Principles and their application in human body.
- Bio mechanics of bone, joint and muscular tissue.
- Structure and shape of the upper extremity including; Bones, Joints, Muscles, Ligaments, Axis of motion, Range of motion.
- Movement analysis, joint integrity and mobility in: Shoulder, elbow, forearm, wrist, hand, fingers.
Course Description

Course Title: Biomechanics & Kinesiology II (lower limbs)
Course Number: 217417200
Course Type: □ General □ Basic ☑ Main
Prerequisite Title (s): Anatomy III (Pelvic & Lower Limbs)

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Course description:
This course deals with principles of kinesiology and mechanics in lower extremity that includes detailed study of motion analysis.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge in kinesiology and biomechanics of the lower extremities.

Course syllabus:
- Structure and shape of lower extremity including:
  - Bones, joints and muscles,
- Axis of motions
- Range of motion analysis, joint integrity and mobility including:
  - Hip, hip, knee, ankle, foot, toes,
- Posture and postural assessment
- Gait analysis
Course Description

Course Title: Biomechanics & Kinesiology III (Vertebral column)

Course Number: 217358600
Course Type: □ General  □ Basic  ☑ Main
Prerequisite Title(s): Anatomy I (Head. Neck & Trunk)

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Course description:
The course deals with principles of kinesiology and mechanics of trunk and spinal column.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge in kinesiology and human body mechanics of the vertebral column.

Course syllabus:
- Anatomic and physiologic basis of spinal movement
- Kinesiology and biomechanics of truck and spinal column.
- Structure and shape of the spinal column, including muscles, bone, joints, curvatures, ligaments.
- Spinal column functions and balance.
Course Title: Therapeutic Exercises I (Principles)
Course Number: 217273800
Course Type: □General □Basic ☑Main
Prerequisite Title (s): Anatomy II, III and Biomechanics & Kinesiology I

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Course description:
This course deals with principles of movement and exercise, classification of movement, physiology of exercise, classification of physiology of exercise and fatigue. This also includes Hydrotherapy and Mechatronics.

General objective of the course:
The purpose of this course is to provide the student opportunities to acquire basic and fundamental knowledge and skills in different aspects of exercise therapy, principles of movement and exercise in land and water (Hydrotherapy) with and without instrument also includes Mechatronics.

Course syllabus:
A. Theory
   - Principles of movement and exercise.
   - Starting position exercise therapy.
   - Classification of movements.
   - Methods of relaxation.
   - Methods of muscle strengthening.
   - Neuromuscular co-ordination
   - Trick movements
   - Educational techniques
Course Description

- Hydrotherapy
- Mechanotherapy
- Physiology of exercise and fatigue
- Methods of suspension and its instruments.
- Mats exercises.
- General exercises.

B. Practice in Lab
Course Description

Course Number: 217293700
Course Type: □General □Basic ☑Main
Prerequisite Title (s): Therapeutic Exercises I

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Course description:
This course deals with principles of movement and exercise with more emphasis on proprioceptive neuromuscular facilitation. This also includes exercises and movement according to neuromotor development.

General objective of the course:
The purpose of this course is to provide the students opportunities to acquire fundaments and advanced knowledge and skills in exercise therapy with emphasis on reflux and sensory integrity including proprioception and kinesthesia.

Course syllabus:

A. Theory
- Principles of treatment by proprioceptive neuromuscular facilitation.
- Patterns of facilitation
- Various methods of facilitation
- Facilitation in upper extremity
- Facilitation in lower extremity
- Facilitation in trunk

B. Practice in Lab (gym)

Course Title: Therapeutic Exercises III (Hemiplegic)
Course Description

Course Number: 217399300
Course Type: □General   □Basic   ☑Main
Prerequisite Title (s): Neurology and Therapeutic Exercises II

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Course description:
The course deals with principles of evaluation and assessment of reflexes as well sensory integrity with emphasis on patients with hemiplegia.

General Objective of the course:
The purpose of this course is to provide the students opportunities to acquire advanced knowledge and skills in exercise therapy with emphasis on hemiplegia disease.

Course syllabus:

A. Theory
- Evaluation and reflex assessment
- Automatic assessment in patients with upper motor neuron diseases.
- Arranging short term and long term planning exercise therapy.
- Reassessment
- Treatment principles and techniques in different schools of thought, and different points of view, including but not limited to: Bobath, Frankle’s, Braunstrom, Rood.

B. Practice in lab (gymnasium)
Course Title: Therapeutic Exercises IV (Cerebral Palsy)
Course Number: 217399300
Course Type: □General   □Basic   ☑Main
Course Description

Prerequisite Title (s): Neurology and Therapeutic Exercises II

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Course description:

The course deals with principles of evaluation and assessment of reflexes as well sensory integrity with emphasis on patients with different type of cerebral palsy.

General Objective of the course:

The purpose of this course is to provide the students opportunities to acquire advanced knowledge and skills in exercise therapy with emphasis on cerebral palsy.

Course syllabus:

A. Theory

- Evaluation and reflex assessment
- Reflex assessment in patients with upper motor neuron diseases.
- Arranging short term and long term planning exercise therapy.
- Reassessment
- Treatment principles and techniques in different schools of thought, and different points of view, including but not limited to: Bobath, Frankle’s, Braunstrom, Rood.

B. Practice in lab (gymnasium)

Course Title: Electrotherapy I (Thermal Agents)
Course Number: 217211400
Course Type: □ General  □ Basic  ☑ Main
Prerequisite Title (s): None
Course Description:

This course deals with principles of Electrotherapy, Electrotherapeutic modalities and thermal agent.

General Objective of the Course:

The purpose of the course is to provide the students opportunities to acquire basic and fundamental knowledge and skills in Electrotherapy as well as an introduction to Thermal agent and modalities.

Course Syllabus:

A. Theory:

- History of Electrotherapy
- Introduction to Electrotherapy
- Electrostatic
- Concepts in thermal physics
- Radiation and heat
- Thermal agents
- Methods of heat generation
- Physiology and Therapeutic effects of thermal agents (heat and cold)
- Indications and contraindications in modalities such as: Hot pack, Paraffin bath, Infrared, Ultraviolet, Short wave diathermy, Microwave diathermy. Laser, ultrasound.
- Phonophoresis.
- Therapeutic and physiologic effects of cold
Course Title: Electrotherapy II (Electrical Modalities)
Course Number: 217214100
Course Type: □General □Basic ✓Main
Prerequisite Title (s): None
Course Description:

This course deals with advanced aspects of Electrotherapy in the field of thermal agents and radiation therapy.

General Objective of the Course

The purpose of this course is to provide the students opportunities to acquire advanced knowledge and skills in Electrotherapy with emphasis on thermal agents and radiation therapy.

Course Syllabus:

A. -Theory:

- Electrical currents, Electrical shocks, Electrical stimulation of nerve and muscle.
- Introduce and indication of:
  - Low frequency currents such as TENS, Faradic, High voltage, Micro current, Diadynamic currents,
  - Medium frequency currents such as:
  - Interferential and Russian currents.
  - Direct and Modified direct currents.
  - Strength Duration Curve (SDC).
  - Iontophoresis.
  - Contraindication of electrical stimulation.
  - Biofeedback.

B. Practice in clinic
Course Description
Course Title: Orthotics, Prosthetic & Assistive Device  
Course Number: 217448400  
Course Type: □ General  □ Basic  ☑ Main  
Prerequisite Title (s): None  

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Course Description:  
This course deals with indication, examination, evaluation and interventions of orthotics and prosthetics in physical therapy and rehabilitation. This also includes mechanical principles, prescription, application, fabrication of assistive, adaptive, protective, supportive, orthotic and prosthetic devices and equipments.

General Objective of the Course:  
The purpose of this course is to provide the students opportunities to acquire basic knowledge, skills and attitudes relevant to examination, evaluation and interventions of orthotics and prosthetics in physical therapy and rehabilitation.

Course syllabus  
A. -Theory  
- Mechanical principles of orthotics and prosthetics  
- External power sources for brace  
- Reasons for prescription  
- Metals and kinds of plastic and rubber materials in manufacturing process  
- Corsets and soft assistive devices
Course Description

- Cervical, thoracic, lumbar, lower and upper extremity braces
- Different types of upper extremity splints for forearm, wrist, hand and fingers
- Brace in scoliosis, spasticity and muscular weakness
- Medical shoe
- Furniture, assistive devices for handicapped
- Adjustment in car (automobile) and its adaptive devices for handicapped
- Causes of amputation, statistics and related surgical and medical problems and ramifications
- Patient assessment prior to prescription of prosthetics
- Proper methods of prosthetics prescription
- Process of manufacturing
- First preliminary inspection
- Preliminary application and training
- Course (period) examination and re-evaluation
- Final review and valuation as well as follow up process
- Occupational problems with prosthetics
- Psychological problems related to amputation
- Gait analysis
- Biomechanics of lower extremity prosthetics at different levels of amputation
- Ready-made and trade products
B. Practice:

Methods of making prosthetics (manufacturing) adapting and controlling (follow-up) lower extremity prosthetics.

- Hand prosthetics clinic (upper extremity)
- Foot prosthetics clinic (lower extremity)
- Wheel chair
- Crutches, walking stick and various walking aids
Course Title: Musculoskeletal Physical Examination (Muscle Testing)

Course Number: 217343700
Course Type: □General □Basic ✓Main
Prerequisite Title (s): None

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Course Description:
This course deals with the different tests and measurement used in the evaluation process. This also includes history taking and proper documentation through the use of SOAP format.

General Objective of the course:
The purpose of this course is to provide the students opportunities to acquire basic knowledge, skills and attitudes, relevant to the administration of physical therapy tests and measurements on patients.

Course Syllabus:
A. Theory
   - Introduction
   - History
   - Principles of range of motion measurements
   - Joint kinetic and kinematics
   - Goniometry
   - Principles of manual muscle testing
   - Different positions of muscle testing
   - Testing charts
   - Muscle testing of: neck, trunk, upper and lower extremity
Course Description

- Gait analysis
- Normal gait phases
- Causal factors of gait
- Causes of pathological gait
- Testing of limb and muscle length and sizes

B: Practice in Laboratory
Course Title: Therapeutic Massage and Mobilization  
Course Number: 217299100  
Course Type: □ General □ Basic ☑ Main  
Prerequisite Title(s): None

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### Course Description

This course deals with principles and fundamental aspects of massage and mobilization. This also includes different types and methods of massage and mobilization application.

### General Objective of the Course:

The purpose of this course is to provide the students opportunities to acquire basic and fundamental knowledge and advanced skills in different types and methods of massage and its applications.

### Course syllabus:

#### A. -Theory

- History
- Physiological effects of massage on circulatory system (blood-lymph)
- Physiological effects of massage on nervous and neuromuscular system
- Physiological effects of massage on muscular tissue and musculoskeletal system
- Physiological effects of massage on lungs
- Physiological effects of massage on skin adipose (fatty) and integumentary system
- Physiological effects of massage on metabolism
- Types of massage
Course Description

- Methods of massage application on whole body and limbs

B. Practice in laboratory
Course Description

Course Title: Evidence-Based Physiotherapy
Course Number:
Course Code:
Course Type: (Main )
Prerequisite Title(s): None

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Course description:

According to the increasing trend of information, it seems necessary to classify this information according to evidences. The students should be able to analysis, formulate and respond to a special question related to various fields of clinical physiotherapy.

General Objective of the course:

The purpose of this course is to provide the students opportunities to familiarized with the evidence based physiotherapy and how to collect the evidences.

Course syllabus:

Definition and foundations of evidence based physiotherapy and introducing the guidelines of the methods of physiotherapy
Clinical Practice (Intership)

Clinical internship begins with observation and shadowing in the fifth term year and gradually progress towards dependent and finally fully independent practice.

In observation, students familiar with assessments and some screening tools and also learn how to take a case history and document the patients sign and symptoms. In the next clinical trainings, students trained more advance under supervision of experienced physical therapist who has at least M.S degree and is the member of the educational staff of the faculty.

During the internship students of physical therapy have to complete the practicum with rotation in different setting from acute to sub-acute and chronic condition in varieties of setting from inpatients (hospital) to outpatient and extended care facilities, which include but not limited to: neurology and neurosurgery, orthopedics, rheumatology, cardiopulmonary, geriatrics, pediatrics, neonatal icu, obstetrics and gynecology, ccu, icu, general surgery and burn center, reconstructive and plastic surgery, acute, (intensive) rehabilitation and traumatology centers and clinics.

Furthermore students have to attend mandatory theory/practical meeting, lectures and conferences as morning report, self and peer review and discussion, clinical sessions and independent study time as well as evaluation and interventions of systems such as; cardiopulmonary, neuromuscular, integumentary, and musculoskeletal, in addition to general sciences review, that includes, but not limited to; anatomy, physiology, biology, pathology also clinical sciences and techniques, such as; different aspects of electrotherapy and electrotherapeutic modalities, manual therapy, mobilization, soft tissue massage and myofascial release, physical agents and mechanical modalities, orthotics and prosthesis prescription, fabrication and application of assistive and supportive devices.

Practice treatment skills and also modification of exercises for the home setting based on the patient's problems, providing knowledge of community resources.

Therapeutic exercises such as aerobic, anaerobic exercises, work conditioning and hardening as well as functional training and activities of daily living (ADL) at home, work and community.
Course Description

Patient related instruction including preparing patient for self-care and managing his/her activities of daily living at home, work with safety as well as evaluating different aspect of home, work and environmental barriers and helping patient in the process of returning back to community with the maximum potential as possible.

Communication skills between physiotherapist and patients and other health care professionals.

Professional, ethical, management, legal and medical record documentation issues will be taught and put into practice.
Course Title: Clinical Practice (Observation)
Course Number: 217447500
Course Type: □ General □ Basic ☑ Main
Prerequisite Title(s): 

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DESCRIPTION

To familiarized with different wards of the hospitals, including Physiotherapy and how to fulfil the patients documents, and how to assess the patients, plan the required treatment and the methods of physiotherapy.
Course Title: Clinical Practice (cardiopulmonary)(Education & Experiences)
Course Number: 217447500
Course Type: □ General □ Basic ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

Cardio care unit (CCU), outpatient and inpatient wards, chest physiotherapy. Breathing exercises, mobilization, cardio-pulmonary rehabilitation, Exercise, pre and post cardiac surgery patients (heart transplant, bypass, valve surgery), chest and cardio-vascular surgical condition.
General abdominal surgery.
In summary assessment, examination, diagnosis, and treatment/management in all cardio-pulmonary and vascular diseases and conditions, general surgery and internal medicine which needs physiotherapy.
Please refer to clinical internship.
Course Title: Clinical Practice (Rheumatology and Skin) (Education & Experiences)
Course Number: 217447500
Course Type: □ General □ Basic ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

Rheumatoid arthritis, Psoriasis, Ankiolosan spondylosis …
In summery assessment, examination, diagnosis, and treatment/management in all Rheumatology and Skin diseases which needs physiotherapy. Please refer to clinical internship.
Course Title: Clinical Practice (Burn Center) (Education & Experiences)
Course Number: 217447500
Course Type: □General  □ Basic  ☑Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

All burns, including electrical, chemical, thermal, …and the related surgery including grafts and flaps.
In summary assessment, examination, diagnosis, and treatment/management in all burn conditions which need physiotherapy.

*Please refer to clinical internship.*
Course Title: Clinical Practice I (Orthopedics) (Education & Experiences)
Course Number: 217342300
Course Type: □ General  □ Basic  ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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**DESCRIPTION**

Musculoskeletal conditions & diseases and injuries of upper quadrant and upper limbs. Pre and Postoperative intensive care for orthopedic surgery, pediatric congenital diseases (Erb, torticollis,...), orthopedic injuries fracture and dislocation, arthroplasty, bone tumor, scoliosis, kyphosis, sport medicine and injuries, soft tissue injuries, physical modulates and techniques, soft tissue reconstructive surgeries. Musculoskeletal age related conditions and diseases.

Please refer to clinical internship.
Course Title: Clinical Practice II (Orthopedics) (Education & Experiences)
Course Number: 217342300
Course Type: □ General □ Basic ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

Musculoskeletal conditions & diseases and injuries of lower quadrant and lower limbs. Pre and Postoperative intensive care for orthopedic surgery, pediatric congenital diseases (clubfoot, CDH,...), orthopedic injuries fracture and dislocation, arthroplasty, bone tumor, scoliosis, kyphosis, sport medicine and injuries, soft tissue injuries, physical modulates and techniques, soft tissue reconstructive surgeries. Musculoskeletal age related conditions and diseases. Please refer to clinical internship.
Course Description

Course Title: Clinical Practice (Outpatients) (Education & Experiences)
Course Number: 217429400
Course Type: □ General  □ Basic  ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

To familiarize with outpatient conditions and home visit.
Admission, assessment and management of the different types of outpatients and those that cannot come to the clinics and are at home.
Course Title: Clinical Practice (Pediatrics) (Education & Experiences)
Course Number: 217429400
Course Type: □ General   □ Basic   ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

The purpose of this course is to provide the students the opportunities to acquire advanced clinical skills in pediatrics since these diseases are prevalent in the community.
Different methods and modalities of physiotherapy for congenital, developmental and acquired conditions
Course Title: Clinical Practice I (Neurology) (Education & Experiences)
Course Number: 217429400
Course Type: □ General  □ Basic  ☑Main
Prerequisite Title (s): Clinical Practice (Observation)

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**DESCRIPTION**

Outpatient and neurology ward patients and rehabilitation, including ICU, neurologic diseases, disorders and injuries, CVA, Coma, brain surgery, stroke and hemiplegia, cerebral palsy, neuro-developmental treatment, exercise and technics, pain clinic, regaining functional activity ADL, education, diagnosis, examination and treatment, management in all neurological conditions, applying exercise and physical agents and modulates programs and exercise education. Please refer to clinical internship.
Course Title: Clinical Practice II (Neurology) (Education & Experiences)
Course Number: 217429400
Course Type: □ General  □ Basic  ☑ Main
Prerequisite Title (s): Clinical Practice (Observation)

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DESCRIPTION

Outpatient and neurology ward patients and rehabilitation, including ICU, neurologic diseases, disorders and injuries, CVA, Coma, brain surgery, stroke and hemiplegia, cerebral palsy, neuro-developmental treatment, exercise and technics, pain clinic, regaining functional activity ADL, education, diagnosis, examination and treatment, management in all neurological condition, applying exercise and physical agents and modulates programs and exercise education. Please refer to clinical internship.
Course Title: Clinical Practice I (Independent Practice)
Course Number: 217345500
Course Type: □ General □ Basic ☑ Main
Prerequisite Title(s): None

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Course Title: Clinical Practice II (Independent Practice)
Course Number: 217345500
Course Type: □ General □ Basic ☑ Main
Prerequisite Title(s): None

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Course Title: Islamic Learning I  
Course Number: 217145100  
Course Type: ☑ General  □ Basic  □ Main  
Prerequisite Title(s): None

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**DESCRIPTION**

- Man and Faith, the existence of God, attributes of God, the problem of evil.
- Monotheism and polytheism.
- Resurrection and immortality.
- From the beginning of the grave, and the world of Limbo.
- Purgatory until the end of the world.
- Origin and Resurrection.
- Prophet hood and Imamat.
- Worldview proof of the possibility and necessity,
- Substantial motion.
- Argumentorder.
- The nature.
- Divine justice.
- Miracle of Quran.
Course Title: Islamic Learning II  
Course Number: 217841100  
Course Type: ☑ General  □ Basic  □ Main  
Prerequisite Title (s): None

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**DESCRIPTION**

Man in Islam.  
Social and political rights in Islam.  
Principles of Islam.  
Concept of God.  
Search for God.  
Theology, aim of creation.  
Creation of human.  
Human Immortality.  
World of Spirits.  
Judgment day, hell, & heaven.
Course Title: Islamic Ethic & Education  
Course Number: 217147800  
Course Type: ☑ General  □ Basic  □ Main  
Prerequisite Title(s): None

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DESCRIPTION

Concept of ethics and education.
Ethics in Islam,
Moral, legal, behavioral ethics in Islam.
Human right and responsibility in Islam,
Concept, importance and role of ethics and Islamic education.
Islamic ethics in medicine.
Patients’ rights according to Islamic ethics.
Course Title: Iran's Islamic Revolution and its roots
Course Number: 217159100
Course Type: ☑ General □ Basic □ Main
Prerequisite Title (s): None

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**DESCRIPTION**

Different stages of the revolutionary movement.
The role of scientific methodology in social change.
Constitutional theoretical issues (Dictatorship - Constitution - civil society - democracy - religious state).
Pahlavi era, cultural, religious and clergy.
Political, traditionalism, intellect, the character of Imam Khomeini and his role in Islamic revolution.
Revolution and the characteristics of various pathology.
Course Title: History of Islam  
Course Number: 217491400  
Course Type: ☑General □Basic □Main  
Prerequisite Title(s): None

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DESCRIPTION

Understanding how the rise and spread of Islam,  
Historiography in Islam.  
Understanding the origin of Islam.  
Contemporary civilization with Islam.  
Knowing the founder of Islam.  
Starting Prophecy of Mohammad (S.W).  
War and Peace in Islam.  
Terms of Islam with Christianity and Judaism.  
Prophet's demise and the succession.  
Analysis 25 years of successors’ government, governing of Ali (A.S).  
Impeccable, Imams (A.S), Imam Mahdi (A.S).
Course Title: Interpretation of Quran  
Course Number:217491400  
Course Type: ☑ General   □ Basic     □ Main  
Prerequisite Title (s): None  

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DESCRIPTION

Understanding and interpretation of the underlying concepts of the holy Quran.
Course Title: Persian literature
Course Number: 113133420
Course Type: General □ Basic □ Main
Prerequisite Title (s): None

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DESCRIPTION

History of literature.
Early literature.
Pre Islamic Persian literature.
Persian literature of the medieval and pre-modern periods.
Early poetry and poets.
Classical poetry.
Religious poetry and literature.
Course Title: Introduction to English language
Course Number: 55117120
Course Type: General □ Basic □ Main
Prerequisite Title (s): None

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<th>Prac. Hour(s):</th>
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**DESCRIPTION**

Reading comprehension and fluency in reading.
Styles of reading, active reading.
Develop and improve vocabulary (words, phrases, and proverbs).
Pronunciation.
Listening skills, active listening, key points in listening, paraphrasing.
Note taking and summarizing.
Course Title: Physical Education I  
Course Number: 711111220  
Course Type: ☑ General □ Basic □ Main  
Prerequisite Title (s): None

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**DESCRIPTION**

Sport management.  
Outline of general effects of exercise.  
Education for children and old people, group exercise.  
Common sport psychology and sociology.  
Principal of physical education, general health and ability in elderly.  
Exercise for community and people.  
Warm up, general stretching.  
Safety skills in sports.
Course Title: Physical Education II  
Course Number: 711113020  
Course Type: ☑ General  □ Basic  □ Main  
Prerequisite Title (s): Physical Education I

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**DESCRIPTION**

One of the following sports including team games or individual sports such as swimming, football, basketball, ping pong, gymnastics, volleyball, specific and detailed theory of one of the aforementioned sport during the practical work. Practical experience involving leadership roles.
Course Title: Family population and regulation
Course Number: 217491400
Course Type: ☑ General  □ Basic  □ Main
Prerequisite Title(s): None

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DESCRIPTION

To familiarize with the foundations of the families and birth control.