Degree Course in Physiotherapy

INTEGRATED COURSE: GERIATRICS
CFU: 5
SSD: MED/09, MED/16,MED/22, MED/24, MED/33
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MODULE: INTERNAL MEDICINE
CFU: 1
SSD: MED/09
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MODULE: RHEUMATOLOGY
CFU: 1
SSD: MED/16
PROFESSOR: PROF. GIUSEPPE SCONOCCHIA e-mail : giuseppe.sconocchia@unicamillus.org

MODULE: VASCULAR SURGERY
CFU: 1
SSD: MED/22
PROFESSOR: PROF. ALESSANDRO BELLISARIO email : alessandro.bellisario@unicamillus.org

MODULE: UROLOGY
NUMERO DI CFU: 1
SSD: MED/24
PROFESSOR: PROF. MICHELE GALLUCCI email : michele.gallucci@unicamillus.org

MODULE: LOCOMOTIVE SYSTEM DISEASES
CFU: 1
SSD: MED/33
PROFESSOR: PROF. COSIMO TUDISCO email : cosimo.tudisco@uniroma2.it

PREREQUISITES

INTERNAL MEDICINE
For a proper understanding, the student should have, but is not strictly mandatory, basic knowledge of cell biology, biochemistry, physiology and anathomy.

RHEUMATOLOGY
Although there are no preparatory prerequisites, notions of genetics, epigenetics and general pathology and the basic concepts of innate and acquired immune response and the basics of autoimmunity and inflammation are necessary. It is also necessary to have a good basic knowledge of human anatomy and physiology in particular of the musculoskeletal system.

VASCULAR SURGERY

Although there are no preparatory requirements, previous knowledge of basic anatomy and physiology is required

UROLOGY

Basic notions of anatomy and physiology of the male urinary and genital apparatus are needed, but these will be taken up and deepened during the lessons.

LOCOMOTIVE SYSTEM DISEASES

Although there are no preparatory prerequisites, good knowledge of human anatomy, joint physiology and kinematics applied to the musculoskeletal system are necessary. Knowledge of important notions on calcium/phosphorus methabolism, connective tissue histology and osteo-methabolic processes (osteo-genetic and osteo-resorption) are also requested.

LEARNING OBJECTIVES

INTERNAL MEDICINE

The teaching of Internal Medicine examines the study of some of the main non communicable diseases and the basis of clinical methodolog.

RHEUMATOLOGY

Learning objective is the knowledge of common rheumatic diseases, of those rheumatic diseases that involve an emergency treatment, of socially relevant rheumatic diseases; recognition of symptoms and signs associated with rheumatic diseases; knowledge of the meaning red flags in rheumatology; to be able to evaluate the results of the most indicative laboratory parameters in the diagnostic iter of rheumatic diseases; knowledge of the correct use of imaging in rheumatology (X-rays, ultrasounds, magnetic resonance, computerized tomography, scintigraphy).
These objectives will be achieved through lectures aimed at improving the ability to address and resolve the main issues of Rheumatology field.

VASCULAR SURGERY

The course of Vascular Surgery aims to introduce the student to the basic knowledge of the various pathologies of the vascular system.

UROLOGY

At the end of the course the student must be able to:Provide the main concepts of anatomy, physiology and pathophysiology of the male urinary and genital apparatus

- *Know the devices of common use in urological patients and describe the assistance given to the person with urology pathology who needs rehabilitative physiotherapy.*
- *Develop diagnostic reasoning and care planning, referring to scientific evidence, in relation to physiotherapy assistance in the post-operative phases of the main urological interventions*

LOCOMOTIVE SYSTEM DISEASES

Learning objective is the knowledge of common orthopaedic diseases, of traumatic lesions also these that involve an emergency treatment.
Recognition of symptoms and signs associated with guidelines associated with

orthopaedic and traumatology; knowledge and correct use of imaging in orthopaedic and traumatology (X-rays, ultrasounds, magnetic resonance, computerized tomography, scintigraphy).
The knowledge of the orthopaedic and traumatology pathogenesis is mandatory to obtain a complete training on the diagnosis and treatment of musculoskeletal diseases and lesions.
These objectives will be achieved through lectures aimed at improving the ability to address and resolve the main issues of Orthopedic and Traumatology field.

LEARNING OUTCOMES

INTERNAL MEDICINE

Knowledge and understanding

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

- *Know and explain the basis of clinical methodology*
- *Know and explain the global burden of diseases*
- *Know and explain cardiovascular diseases*
- *Know and explain the basis of the stroke*
- *Know and explain Pulmonary Obstructive Disease (COPD)*
- *Know and explain Diabetes.*

Applying knowledge and understanding

At the end of the teaching the student will be able to cooperate with other healthcare providers in making decisions regarding diagnosis, treatment, and monitoring patient's conditions using laboratory testings in order to improve clinical outcomes at a greatly reduced costs.

Communication skills

At the end of the teaching the student will be able to use scientific terminology, specific for the the Internal Medicine and in the field of clinical research.

Making judgements

At the end of the course, the student must be able to carry out a rough assessment of the topics covered in Internal Medicine.

RHEUMATOLOGY

knowledge and understanding

At the end of this course the student will have to know:

- The general mechanisms of innate and acquired immunity
- The main signs and symptoms and laboratory parameters in rheumatic diseases
- The imaging techniques in Rheumatology
- The classification of rheumatic diseases.
- Inflammatory arthritis
- Extra-articular rheumatisms
- Main connective tissue diseases
- Outline on pharmacological, rehabilitative and thermal therapeutic strategies in rheumatic diseases

Applying knowledge and understanding

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

- use the acquired knowledge to autonomously deepen aspects related to the specific field to which the student will devote at a professional level.

communication skills
At the end of the course the student must know:
- *Use the acquired knowledge and specific scientific terminology for any training courses, Masters or other*

making judgements
At the end of the course the student must know:
- *Carry out rough assessments of the topics covered*

VASCULAR SURGERY

Knowledge and understanding
At the end of this course the student will need to:
• Know the general and systematic pathology of the vascular system
• Distinguish the main diagnostic methods in current use.
• Know the various therapeutic approaches.

Applying knowledge and understanding
At the end of the course the student will be able to:
• Use the knowledge acquired for an in-depth study of aspects relating to the specific field to which the student will dedicate himself in the context of his professional activity;
• Particular emphasis will be given to semeiotic reasoning and differential diagnostic framing

Communication skills
At the end of the course the student must:
• Use specific scientific terminology appropriately.
• Understand the specific nomenclature of vascular pathology

Making judgements
At the end of the course the student must:
•. make general assessments of the topics covered.
• distinguish vascular pathologies by degree of urgency

UROLOGY
knowledge and understanding
- *At the end of this teaching the student will need to know:Know the main concepts of anatomy, physiology and pathophysiology of the male urinary and genital apparatus*
- *Knowing how to recognize the main male urological and genital pathologies, in particular*
- *Know the main urological surgical procedures and, consequently, have notions on post-operative physiotherapy management*
- *Know the devices of common use in urological patients (urostomies, catheters, drainages etc.)*

Applying knowledge and understanding
At the end of the course the student will be able to:

- *Use the acquired knowledge to be able to recognize the main urological pathologies and manage them from a physiotherapy assistance point of view in a hospital environment (inpatient ward), long-term care and home care.*

communication skills
At the end of the course the student must know:

- *Use the acquired knowledge and specific scientific terminology for any training courses, Masters or other*

making judgements
At the end of the course the student must know:

- *Carry out rough assessments of the topics covered*

LOCOMOTIVE SYSTEM DISEASES

knowledge and understanding
At the end of this course the student will have to know:

- *The main signs and symptoms and laboratory parameters in orthopedic diseases*
- *The main signs and symptoms in the traumatic musculoskeletal lesions*
- *The imaging techniques in orthopedics and traumatology*
- *The principal criteria of the classification of ortopedic diseases and traumatologic lesions*
- *the management of pharmacological, rehabilitative and thermal therapeutic strategies in orthopedic diseases and musculoskeletal lesions.*

Applying knowledge and understanding
At the end of the course the student will have to :

- use the acquired knowledge to autonomously deepn the aspects related to the specific field to which he will devote at a professional level ;

communication skills
By the end of the course the student should know how to:

- correctly use the specific scientific terminology.

making judgements
By the end of the course the student should know how to :

- do general evaluations over the topics covered during lectures.

COURSE SYLLABUS

INTERNAL MEDICINE
Introduction to Non Communicable Diseases and clinical methodology
Global burden of diseases
Cardiovascular diseases with particular attention to prevention programs
The pathophysiological bases of stroke cerebri, risk factors and clinical pictures
Respiratory Failure and Pulmonary Obstructive Disease (COPD)
The bases of metabolic diseases with particular reference to Diabetes Mellitus

RHEUMATOLOGY

INTRODUCTION • Immunity and autoimmunity • Signs and symptoms of rheumatic diseases, laboratory tests • Imaging in Rheumatology • Classification of Rheumatic diseases; ARTHRITIS • Osteoarthritis and low-back pain • Inflammatory arthritis • Microcrystal arthritis, infectious arthritis • Spondylarthritis including Anchylosing spondylitis, psoriatic arthritis and enteropathic spondylarthritis • Rheumatoid arthritis; EXTRA-ARTICULAR RHEUMATISMS • Osteoporosis • Fibromyalgia • Localized muscle-tendon diseases: enthesopathy, tenosynovitis • Neurological and neurovascular diseases: root compression neuropathies, algodystrophy; CONNECTIVE TISSUE DISEASES • Systemic lupus erythematosus, antiphospholipid syndrome, polymyositis dermatomyositis, systemic sclerosis, Sjogren syndrome, mixed connective tissue disease • Miscellaneous, Vasculitis and polymyalgia rheumatica; OUTLINE OF THERAPY: drugs, thermal and rehabilitation therapy in rheumatic diseases

VASCULAR SURGERY

The first part of the course will introduce the anatomy and physiology of the vascular sys-temIn the second part of the course the various pathologies of the arterial and venous vascular system will be addressedIn the final part of the course clinical cases and relative treatment will be exemplified.

UROLOGY

- *bases of anatomy of the urogenital apparatus and physiology of urination.*
- *Semeiotic bases of the urogenital system*
- *Symptoms and dysfunctions of the low urinary tract (retention and urinary incontinence)*
- *Pelvic floor rehabilitation therapy*
- *Main characteristics of tumors of the urogenital system and postoperative rehabilitation*
- *Bladder catheterization and other urinary drainages*

LOCOMOTIVE SYSTEM DISEASES

Musculoskeletal system anatomy and histology, orthopedic terminology.
Traumatology. Major joints musculoskeletal traumatology: general concepts, physiopathology, clinical signs, instrumental examinations, therapeutic indications, early and late complications.
Osteoporosis and fragility fractures. Principal pediatric orthopedic diseases. Upper limb and lower limb principal sports traumatology diseases, arthroscopic general concepts, cartilage lesions general concepts.
Orthopedics. Spine, upper limb and lower limb principal orthopedic diseases, degenerative osteoarthritis and principal degenerative joint diseases: general concepts, physiopathology, clinical signs, instrumental examinations, therapeutic indications, early and late complications .

COURSE STRUCTURE

INTERNAL MEDICINE

Lectures, presentation and interactive discussion of clinical scenarios, cooperative learning.

RHEUMATOLOGY

The Course is structured in 10 hours of frontal teaching, divided into lessons of 2, 4 or 5 hours according to the academic calendar.

VASCULAR SURGERY

The Teaching is structured in XX hours of frontal teaching, divided into 2-hour lessons based on the academic calendar. Lectures will include theoretical lessons and supplementary seminars on the covered topics.
During the lectures the topics contained in the module program will be illustrated and commented.
At the end of the theoretic lessons, clinical cases will follow.

UROLOGY

The course includes 10 hours of lectures, divided into 2 or 4 hour lessons based on the academic calendar.

LOCOMOTIVE SYSTEM DISEASES

The Course is structured in 10 hours of frontal teaching, divided into lessons of 2, 4 or 5 hours according to the academic calendar.

COURSE GRADE DETERMINATION INTEGRATED COURSE

The verification of the students' preparation in the modules of Rheumatology, Orthopedics and Vascular Surgery will take place through an oral exam. During the oral exam, the examining commission will evaluate the student's ability to apply the knowledge and will ensure that the skills are adequate to support and solve problems of a rheumatological, orthopedic and vascular nature. The following will also be assessed: making judgements, communication skills and learning skills as indicated in the Dublin descriptors.
The assessment of learning from the subject Internal Medicine will be expressed in 30/30 divided as follows:
10/30 points for the personal work/thesis
20/30 points for the oral interview
The evaluation will take into account:
- Knowledge and skills acquired during the course
- Active participation during lessons, clinical case simulations and cooperative learning carried out in the classroom
- Ability to revise the acquired knowledge in a personal and critical way
- Expressive properties of use, in particular, of specialist terminology.
The verification of the students' preparation in the Urology subject involves a written test for admission to the oral exam, with 30 closed questions with multiple choice and/or open questions. For each correct answer 1 point will be awarded. Students with a score equal to or higher than 18/30 will be admitted to the oral exam. During the oral exam, the Examining Commission will evaluate the student's ability to apply the knowledge and will ensure that the skills are adequate to manage problems of a urological nature.
The final vote will be determined collectively by the Commission considering the results of the various modules.

READING MATERIALS

INTERNAL MEDICINE

Kaspi, Haucer, Fauci, Longo, Jameson, Lo Scalzo. Harrisons Manual of Medicine, 19th Edition (Harrison's Manual of Medicine) (English Edition)

Available also the Pocket Manual
McGraw-Hill Education / Medical; 19th Edition (2016)
ISBN 978-0-07-182852-9

Fred F. Ferri. Practical Guide to the care of the Medical Patient.
Mosby Elsevier (9th Edition) 2014
ISBN: 978-1-4557-4459-6

Raffaele Antonelli Incalzi. Medicina Interna per Scienze Infermieristiche
Piccin Editore (2012)
ISBN- 978-88-299-2114-0

Teaching material provided by the teacher during the lessons

RHEUMATOLOGY

- Rheumatology, Evidence-Based Practice for Physiotherapists and Occupational Therapists. Dziedzic & Hammond. Elsevier - Churchill Livingstone, 2010
- Unireuma - Reumatologia per studenti e medici di medicina generale. Valesini et al. Ed. Idelson Gnocchi, 2018

Walk-in appointments will be offered on Mondays from 9:30a.m. - 12:30 a.m., ground floor, Students' Counseling Office.

VASCULAR SURGERY

1) Lecture notes
2) Vascular and Endovascular Surgery, 6th Edition, Ian Loftus & Robert Hinchliffe, Elsevier

UROLOGY

- Lise M. Chirurgia per le professioni sanitarie. Padova: Ed.Piccin, Edizione IV, 2006, Volume 2
- Urologia, Cosa sapere di, Bassi P, 2006, Cortina Editore, Padova
- Manuale di Urologia e Andrologia, a cura del Collegio dei Professori di Urologia, 2010, Pacini Editore
- Evidence-Based Physical Therapy for the Pelvic Floor. 2nd Edition Bridging Science and Clinical Practice. Kari Bo Bary Berghmans Siv Morkved Marijke Van Kampen.Churchill Livingstone

LOCOMOTIVE SYSTEM DISEASES

- Mark D Miller, Jennifer A Hart, John M. MacKnight .Essential Orthopaedics. Saunders Elsevier (2010)
- Jon C. Thompson: Netter's Concise Orthopaedic Anatomy, Elsevier (2016)