



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2023/2024		
MASTER'S DEGREE (MSC)	MEDICINE AND SURGERY		
INTEGRATED COURSE	SYSTEMATIC PATHOLOGY IV - INTEGRATED COURSE		
CODE	13257		
MODULES	Yes		
NUMBER OF MODULES	3		
SCIENTIFIC SECTOR(S)	MED/16, MED/13, MED/15		
HEAD PROFESSOR(S)	GUARNOTTA VALENTINA	Ricercatore a tempo determinato	Univ. di PALERMO
	GIORDANO CARLA	Professore a contratto in quiescenza	Univ. di PALERMO
OTHER PROFESSOR(S)	BOTTA CIRINO	Professore Associato	Univ. di PALERMO
	GUARNOTTA VALENTINA	Ricercatore a tempo determinato	Univ. di PALERMO
	GUGGINO GIULIANA	Professore Ordinario	Univ. di PALERMO
	PIZZOLANTI GIUSEPPE	Ricercatore	Univ. di PALERMO
	MANCUSO SALVATRICE	Ricercatore	Univ. di PALERMO
	SIRAGUSA SERGIO	Professore Ordinario	Univ. di PALERMO
	GIORDANO CARLA	Professore a contratto in quiescenza	Univ. di PALERMO
	RIZZO CHIARA	Ricercatore a tempo determinato	Univ. di PALERMO
CREDITS	9		
PROPAEDEUTICAL SUBJECTS	17453 - PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - INTEGRATED COURSE		
MUTUALIZATION			
YEAR	4		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>BOTTA CIRINO Friday 12:00 16:00 Direzione dell'UO Ematologia, plesso 13a, Policlinico "P. Giaccone" di Palermo</p> <p>GIORDANO CARLA Wednesday 12:00 14:00 Sede Endocrinologia, DIBIMIS, Piazza delle Cliniche 2, 90127 Palermo</p> <p>GUARNOTTA VALENTINA Thursday 12:00 12:30</p> <p>GUGGINO GIULIANA Monday 9:00 10:00 Reumatologia , Piazza delle cliniche n2</p> <p>MANCUSO SALVATRICE Monday 12:00 14:00 Ematologia, Policlinico° piano Tuesday 12:00 14:00 Ematologia, Policlinico° piano Wednesday 12:00 14:00 Ematologia, Policlinico° piano Thursday 12:00 14:00 Ematologia, Policlinico° piano Friday 13:00 15:00 Ematologia, Policlinico° piano</p> <p>PIZZOLANTI GIUSEPPE Monday 12:00 13:00 Dipartimento Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"</p>		

	RIZZO CHIARA Monday 12:00 13:00 Piazza delle cliniche n2 edificio 2a UO di reumatologia SIRAGUSA SERGIO Tuesday 16:00 18:00 Direzione dell'UO di Ematologia, Policlinico P. Giaccone
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DOCENTE: Prof.ssa CARLA GIORDANO- Sede *CHIRONE*

PREREQUISITES	It is suggested to have accomplished with the matters of first three year period
LEARNING OUTCOMES	LEARNING OUTCOMES Knowledge and understanding of molecular, cellular, biochemical and physiological mechanisms regulating the endocrine, immune and kidney functions. Knowledge and understanding of etiology, pathophysiology, clinical presentation and natural story of the main endocrine, rheumatic and kidney diseases. Ability in implementing knowledge and using diagnostic tests to prevent and treat endocrine, rheumatic and kidney diseases Judgement autonomy about problem solving in patients affected by endocrine, rheumatic or kidney diseases. Communicative skills with patients and their relatives and in academic, professional and social fields Learning skills about the specialized terminology and ability to consult scientific publications and to use information technology for the diagnostic and therapeutic process.
ASSESSMENT METHODS	Oral exam
TEACHING METHODS	Frontal lectures

DOCENTE: Prof.ssa VALENTINA GUARNOTTA- Sede *HYPATIA*

PREREQUISITES	Have passed all the teachings of the first three years
LEARNING OUTCOMES	Knowledge and understanding Know the molecular, cellular, biochemical and physiological mechanisms that regulate organ functions related to endocrine secretory functions, to those immunological and renal. Know the etiology, the pathophysiology, the clinical and laboratory presentation and the natural history of acute disease e chronic endocrine, rheumatological and renal. Ability to apply knowledge and understanding Be able to perform basic diagnostic and technical procedures, know how to analyze and interpret the results, in order to define them correctly the nature of a problem, whether of endocrinological or rheumatological relevance or nephrological. Be able to execute strategies correctly adequate diagnostics in order to safeguard life and know how to apply i principles of evidence-based medicine in the field of endocrinology, rheumatology and nephrology. Be able to correctly and autonomously recognize emergencies most common medicines in the fields of endocrinology, rheumatology and nephrology. Judgment autonomy Be able to make personal judgments to solve analytical problems e critical ("problem solving") Know how to identify, formulate and solve problems of patient using the basis of scientific thought and research. Communication skills Listen carefully to understand and summarize relevant information on all issues, understanding their contents. Put into practice the communication skills to facilitate understanding with patients and them relatives, enabling them to make decisions as equal partners. Interact with others professional figures involved in the care of patients through the work of efficient group. Learning ability Be able to collect, organize and interpret correctly health and biomedical information from the various resources and databases available. Know how to use technology associated with information and communications as the right support to diagnostic, therapeutic and preventive practices and for surveillance and monitoring of the health level.
ASSESSMENT METHODS	Oral examination -
TEACHING METHODS	Frontal lessons

MODULE BLOOD DISEASES

Prof. CIRINO BOTTA - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

- Harrison's principles of internal medicine (capitoli inerenti l'ematologia)
- Ematologia. Per medicina, scienze biologiche, biotecnologie mediche; Curatori N. Giuliani, A. Olivieri; Editore Idelson-Gnocchi
- Manuale di ematologia; Autori Paolo Corradini, Robin Foà; Editore Minerva Medica
- Linee guida internazionali (ESMO, NCCN)

AMBIT	50407-Formazione clinica interdisciplinare e medicina basata sulle evidenze
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Knowledge of pathophysiology, clinical, laboratory and instrumental diagnostics of major benign and oncologic hematologic diseases. Definition of prognostic features and principles of management of benign and oncologic hematologic diseases. Microcytic, normocytic and macrocytic anemias (pathophysiological mechanisms, clinic, diagnostic framing, differential diagnosis, management), hemoglobinopathies and red blood cell disorders responsible for anemia. Hereditary and acquired thrombocytopenia, thrombocytosis (most common causes, differential diagnosis), leukopenia and leukocytosis (most common causes, diagnostic workup and differential diagnosis). Acute myeloid and lymphoblastic leukemia: molecular diagnosis, role of cytogenetics and molecular biology in defining prognosis, clinical behavior, differential diagnosis, principles of treatment. Chronic myeloproliferative neoplasms: role of molecular biology, major clinical pictures, complications. Chronic lymphoproliferative neoplasms: clinical aspects, staging, role of cytogenetics and molecular biology in the diagnostic and prognostic process, principles of management. Monoclonal gammopathies: from MGUS to multiple myeloma: diagnostic pathway, clinical and laboratory pictures, differential diagnosis, systems of staging and prognosis. Genetic and functional thrombophilia screening. Hemorrhagic screening: role of hemorrhagic screening, clinical features; major congenital (von Willebrand disease, hemophilia A and B, rare coagulation factor deficiency) and acquired hemorrhagic disorders. Learning of the main laboratory diagnostic aspects and principles of transfusional medicine and passive and cellular immunotherapy.

SYLLABUS

Hrs	Frontal teaching
2	Bone marrow microenvironment and diagnostic in hematology
3	Anemias: from diagnosis to therapy
5	Myelodysplastic syndromes, Acute Myeloid and Lymphoid leukemias
2	Chronic myeloproliferative disorders: chronic myeloid leukemia, polycythemia vera, primary myelofibrosis and essential thrombocythemia
5	Lymphoproliferative disorders (Hodgkin and non-Hodgkin diseases, chronic lymphocytic leukemia)
5	Monoclonal gammopathies (multiple myeloma and AL amyloidosis) and Waldenstrom Disease
2	Platelet diseases
3	Coagulation disorders: thrombophilia and hemorrhagic diseases
3	Principles of Immunotherapy, cell therapy, bone marrow transplantation and transfusion medicine

MODULE ENDOCRINOLOGY

Prof. GIUSEPPE PIZZOLANTI - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

Giugliano. Endocrinologia & Malattie del Metabolismo. IV Edizione, ISBN: 9788879477215

AMBIT	50419-Clinica delle specialità medico-chirurgiche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

- Knowledge and understanding

Acquire the skills for understanding the physiopathological, biochemical and molecular pictures of the main endocrinopathies, understanding the specialized language used.

- Ability to apply knowledge and understanding

Apply the acquired knowledge to analyze and interpret the endocrine problems that patients may present. Apply the principles of evidence-based medicine in the conduct of clinical practice.

- Autonomy of judgment

Knowing how to identify and solve the patient's problems using the acquired knowledge and be able to autonomously formulate diagnostic-prognostic-therapeutic judgments.

- Communication skills

Explain to patients in a correct way the clinical condition of the case, with the necessary clarifications on the repercussions in terms of acute or chronic complications of the underlying pathology. Educate the patient in a clear and exhaustive way to correct compliance with the recommended dietetic-behavioral norms. Interact with other specialist figures from the perspective of a multidisciplinary team.

- Learning skills

Ability to collect, organize and correctly interpret the information acquired from the various resources available, in particular to integrate information through the consultation of scientific publications in the sector acquired above all through the use of IT tools (Pubmed, Internet)

SYLLABUS

Hrs	Frontal teaching
2	Presentation of the course. Introduction to the study of endocrinology. Background. Concept of hormone, gland, endocrine, paracrine, autocrine, feedback mechanisms
2	Pathophysiology of the hypothalamus-pituitary-target gland axes
2	Hypopituitarism (clinical, diagnosis and therapy). Pituitary adenomas
2	Prolactinoma (clinic, diagnosis, therapy)
2	Pathophysiology of the somatotrophic axis (GH-IGF1 axis), GHD
3	GH-secreting pituitary adenoma (acromegaly, gigantism): pathophysiology, clinic, diagnosis, therapy: Therapeutic innovations in acromegaly
3	Adrenal pathophysiology. Adrenal hyperfunction (M. Conn, Pheochromocytoma). Cushing's disease (classification, clinic, differential diagnosis, new medical therapies)
3	Adrenal hypofunction (M. Addison and acute Addisonian crisis - clinic, diagnosis and therapy). Adrenogenital syndromes
4	Thyroid pathophysiology. Hyperthyroidism (classification, clinic, diagnosis, therapy). Hypothyroidism (classification, clinic, diagnosis and therapy). Thyroiditis (acute, subacute, chronic). Autoimmune thyroid disorders (M. di Graves, T. di Hashimoto) Goitrogenic pathology, Thyroid tumors
4	Pathophysiology of diabetes mellitus. Classification and diagnosis. Type 1 diabetes (clinical, diagnosis, therapy). Type 2 diabetes. LADA and MODY type diabetes. Acute and chronic complications of diabetes
2	Polycystic ovary syndrome (pathophysiology, classification and diagnostic criteria, clinic and therapy)
1	Rare syndromes (MEN, APS)

MODULE BLOOD DISEASES

Prof. SERGIO SIRAGUSA - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Ematologia, N. Giuliani, A. Oliveri, Edzioni Idelson-Gnocchi
 Corso di Malattie del Sangue e degli organi emolinfopoietici. S. Tura, M. Cavo, PL. Zinzani, Società Editrice Esclupaio
 Harrison's Principles of Internal medicine (capitoli inerenti l'ematologia)
 Ematologia. Per medicina, scienze biologiche, biotecnologie mediche; Curatori N. Giuliani, A. Oliveri; Editore Idelson-Gnocchi
 Manuale di ematologia; Autori Paolo Corradini, Robin Foà; Editore Minerva Medica
 Linee guida internazionali

AMBIT	50407-Formazione clinica interdisciplinare e medicina basata sulle evidenze
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Knowledge of physiopathology, clinical, laboratory and instrumental diagnostics of the main haematological pathologies, both oncological and benign. Definition of prognostic characteristics and principles of management of haematological neoplasms and benign haematological diseases. Microcytic, normocytic and macrocytic anemias (pathophysiological mechanisms, clinical, diagnostic framework, differential diagnosis, management), hemoglobinopathies and red blood cell pathologies responsible for anemia. Hereditary and acquired platelet disorders, platelets (most common causes, differential diagnostics), leukopenia and leukocytosis (most common causes, diagnostic workup and differential diagnosis) Acute myeloid and lymphoblastic leukemia: molecular diagnostics, role of cytogenetics and molecular biology in defining prognosis, clinical pictures, differential diagnosis, treatment principles. Chronic myeloproliferative neoplasms: role of molecular biology, main clinical pictures, complications. Chronic lymphoproliferative neoplasms: clinical aspects, staging, role of cytogenetics and molecular biology in the diagnostic and prognostic process, management principles. Monoclonal gammopathies: from MGUS to multiple myeloma: diagnostic procedure, clinical and laboratory pictures, differential diagnosis, staging and prognosis systems. Genetic and functional thrombophilic screening. Hemorrhagic screening: role of hemorrhagic screening, clinical characteristics; the main congenital haemorrhagic pathologies (von Willebrand disease, haemophilia A and B, rare deficiency of coagulation factors) and acquired. Learning of the main laboratory diagnostic aspects and the principles of passive and cellular immunotherapy.

SYLLABUS

Hrs	Frontal teaching
30	<p>EDUCATIONAL ACTIVITIES - SPECIFIC OBJECTIVES AND PROGRAM</p> <ol style="list-style-type: none"> 1) pathophysiology of the medullary microenvironment and principles of haematological diagnostics 2) Anemias: from diagnosis to therapy 3) MDS, Acute myeloid and lymphoblastic leukemias -1 4) MDS, acute myeloid and lymphoblastic leukemias -2 5) Chronic myeloproliferative diseases: CML, PV, TE and MFI 6) Non-Hodgkin's lymphomas 7) Hodgkin's lymphomas and LLC 8) Plasma cell dyscrasias: MGUS, SMM and MM 9) Atypical plasma cell dyscrasias and amyloidosis 10) Platelet disorders and platelet disorders 11) The pathologies of coagulation: hemorrhagic and thrombophilic screening 12) Principles of immunotherapy, cell therapy, BM transplantation and transfusion medicine

MODULE ENDOCRINOLOGY

Prof.ssa CARLA GIORDANO - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Giugliano. Endocrinologia e malattie del metabolismo. Idelson Gnocchi, 4 edizione. ISBN 978-88-7947-7215

Slides del docente

AMBIT	50419-Clinica delle specialità medico-chirurgiche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

-Knowledge and understanding
Acquire the skills to understand the pathophysiology, biochemistry, and molecular biology of the main endocrine disorders. Understanding of the technical language used.

-Applying knowledge and understanding
Apply the acquired knowledge to analyze and interpret endocrine problems that patients can present. Apply the principles of evidence-based medicine in the clinical activity.

-Making judgments
Know how to identify and solve patient problems using acquired knowledge and be able to formulate personal judgments to solve patient-endocrine issues.

-Communication skills
Explain to patients in a correct manner, with particular emphasis on prevention and risk of acute or long-term complications, increasing the patient's compliance. Interact with other professional figures involved in patient care through efficient networking (multidisciplinary team)

- Learning ability
Ability to collect, organize and interpret correctly the informations acquired from different available resources. In particular, to integrate the information through the consultation of scientific publications in the sector, mainly through the use of computer tools (Medline, Internet)

SYLLABUS

Hrs	Frontal teaching
2	Introduction to the study of endocrinology. Historical background, concept of endocrine glands, hormones, autocrine-paracrine and endocrine relationship, feed-back.
2	Pathophysiology of hypothalamic-pituitary axes
2	Hypopituitarism (clinic, diagnosis and treatment). Pituitary adenomas (classification)
2	Prolactin-secreting pituitary adenoma (clinic, diagnosis and therapy)
2	Pathophysiology of GH-IGF-1 axis. GH deficiency in adults and in children (etiology, diagnosis, treatment).
3	Acromegaly and gigantism: pathophysiology, clinical features, diagnosis, treatment. New therapies of acromegaly.
3	Pathophysiology of adrenal glands. Adrenal hyperfunction (M. Conn, pheochromocytoma). Cushing disease /classification, clinical features, diagnosis, older and new treatments)
3	Adrenal hypofunction (Addison disease and acute adrenal crisis): clinical features, diagnosis and treatment. Adrenogenital syndromes.
4	Pathophysiology of thyroid diseases. Clinic, diagnosis and treatment of hyperthyroidism and hypothyroidism. Thyroiditis. Autoimmune thyroid diseases (Graves, Hashimoto). Goiter. Thyroid tumors.
4	Pathophysiology of diabetes mellitus. Type 2 diabetes (classification, clinic, diagnosis, older and new treatments). Type 1 diabetes mellitus. LADA and MODY (definitions and clinical-therapeutic approach). Acute and chronic complications.
2	Polycystic ovary syndrome (pathophysiology, classification, diagnosis, treatment)
1	Rare endocrine diseases (MEN, APS)

MODULE RHEUMATOLOGY

Prof.ssa CHIARA RIZZO - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

Unireuma

AMBIT	20949-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The course is aimed at making the student capable of integrating the knowledge already acquired in previous years, in particular in the courses of medical pathophysiology, methodology, pharmacology and internal medicine, in order to be able to correctly perform the anamnestic investigation, the collection of objective data, the proposal of a diagnostic and therapeutic path in the rheumatology field. Furthermore, students will have to become aware of the clinical complexity deriving from comorbidities, generally present in real clinical practice. At the end of the didactic activities the student must be able to: - identify the patient's problems (personal, environmental, social, subjective and objective (symptoms and signs), define them from a medical-scientific point of view, understand their meaning from the pathophysiological point of view and categorize them according to severity and urgency - formulate one or more diagnostic hypotheses, having acquired clinical reasoning skills with the aid of the presentation of real clinical cases - establish the priority of diagnostic hypotheses, based on the severity and urgency of the patient's problems - know the main diagnostic tests referring to rheumatological pathology, their sensitivity and specificity characteristics - make a therapeutic decision based on the best evidence of efficacy provided by the literature (Evidence Based Medicines) and applied to a specific patient. - know the adverse effects of drugs and their interactions, on and various components of the various organs and systems given the multisystemic nature of rheumatological diseases. - being able to verify the effectiveness of the therapy and its cost-benefit ratio. - to know the prognosis of the main rheumatic diseases and their natural history - to know the concepts of risk factors and risk markers - to establish adequate communication with the patient and family members, considering personal, family, environmental and social.

SYLLABUS

Hrs	Frontal teaching
30	1. Classification and epidemiology of rheumatic diseases 2. Laboratory and imaging in rheumatology 3. Evaluation of signs and symptoms of rheumatic diseases 4. Osteoarthritis 5. Spondyloarthritis: ankylosing spondylitis, psoriatic arthritis, enteropathic arthropathies, reactive arthritis 6. Arthritis due to infectious agents 7. Rheumatoid arthritis 8. General connective tissue diseases: 9. Systemic Lupus Erythematosus (SLE), 10. Antiphospholipid antibody syndrome 11. Systemic sclerosis 12. Inflammatory myopathies (polymyositis, dermatomyositis, inclusion body myositis) 13. Syndrome by Sjögren 14. Vasculitis: generality, classification and clinical pictures, Vasculitis of the large vessels (Horton's arteritis, Takayasu's arteritis), Vasculitis of medium-sized vessels (Kawasaki disease, PAN) Vasculitis of the small vessels (ANCA-associated vasculitis) ; Cryoglobulinemic syndromes, Henoch-Schonlein purpura 15. Other vasculitis (Behçet's disease, Cogan's syndrome); 16. Arthropathies caused by microcrystals (gout, chondrocalcinosis, hydroxyapatite deposits, etc.) .17 Rheumatic polymyalgia 18 Fibromyalgia 19. Main bone diseases: osteoporosis, Paget's disease, 20. Algodystrophic syndromes. 21 Periodic fevers

MODULE RHEUMATOLOGY

Prof.ssa GIULIANA GUGGINO - Sede CHIRONE, - Sede CHIRONE, - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

Unireuma

AMBIT	20949-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The course is aimed at making the student capable of integrating the knowledge already acquired in previous years, in particular in the courses of medical pathophysiology, methodology, pharmacology and internal medicine, in order to be able to correctly perform the anamnestic investigation, the collection of objective data, the proposal of a diagnostic and therapeutic path in the rheumatology field. Furthermore, students will have to become aware of the clinical complexity deriving from comorbidities, generally present in real clinical practice. At the end of the didactic activities the student must be able to: - identify the patient's problems (personal, environmental, social, subjective and objective (symptoms and signs), define them from a medical-scientific point of view, understand their meaning from the pathophysiological point of view and categorize them according to severity and urgency - formulate one or more diagnostic hypotheses, having acquired clinical reasoning skills with the aid of the presentation of real clinical cases - establish the priority of diagnostic hypotheses, based on the severity and urgency of the patient's problems - know the main diagnostic tests referring to rheumatological pathology, their sensitivity and specificity characteristics - make a therapeutic decision based on the best evidence of efficacy provided by the literature (Evidence Based Medicines) and applied to a specific patient. - know the adverse effects of drugs and their interactions, on and various components of the various organs and systems given the multisystemic nature of rheumatological diseases. - being able to verify the effectiveness of the therapy and its cost-benefit ratio. - to know the prognosis of the main rheumatic diseases and their natural history - to know the concepts of risk factors and risk markers - to establish adequate communication with the patient and family members, considering personal, family, environmental and social.

SYLLABUS

Hrs	Frontal teaching
30	1. Classification and epidemiology of rheumatic diseases 2. Laboratory and imaging in rheumatology 3. Evaluation of signs and symptoms of rheumatic diseases 4. Osteoarthritis 5. Spondyloarthritis: ankylosing spondylitis, psoriatic arthritis, enteropathic arthropathies, reactive arthritis 6. Arthritis due to infectious agents 7. Rheumatoid arthritis 8. General connective tissue diseases: 9. Systemic Lupus Erythematosus (SLE), 10. Antiphospholipid antibody syndrome 11. Systemic sclerosis 12. Inflammatory myopathies (polymyositis, dermatomyositis, inclusion body myositis) 13. Syndrome by Sjögren 14. Vasculitis: generality, classification and clinical pictures, Vasculitis of the large vessels (Horton's arteritis, Takayasu's arteritis), Vasculitis of medium-sized vessels (Kawasaki disease, PAN) Vasculitis of the small vessels (ANCA-associated vasculitis) ; Cryoglobulinemic syndromes, Henoch-Schonlein purpura 15. Other vasculitis (Behçet's disease, Cogan's syndrome); 16. Arthropathies caused by microcrystals (gout, chondrocalcinosis, hydroxyapatite deposits, etc.) .17 Rheumatic polymyalgia 18 Fibromyalgia 19. Main bone diseases: osteoporosis, Paget's disease, 20. Algodystrophic syndromes. 21 Periodic fevers

MODULE BLOOD DISEASES

Prof.ssa SALVATRICE MANCUSO - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

EMATOLOGIA, a cura di Giuliani e Olivieri (Idelson-Gnocchi)
Corso di Malattie del Sangue e degli organi emolinfopoietici (Tura - Cavo-Zinzani, Società editrice Esculapio)

AMBIT	50407-Formazione clinica interdisciplinare e medicina basata sulle evidenze
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The ultimate goal of the blood diseases module is the achievement of knowledge and understanding in the field of physiopathology, the clinic and medical therapy of the main hematological diseases, as well as knowledge of specific laboratory (morphological, immunophenotypic, molecular biology) aspects of the field. Essential prerequisites for learning and final assessment are: successful completion of the exams relating to the courses indicated as preparatory for the IC, adequate knowledge of the notions of Human Anatomy and Histology, Biology and genetics, Physiology, General Pathology, Immunology, microbiology and virology inherent to the educational objectives of the course

SYLLABUS

Hrs	Frontal teaching
3	Hematopoiesis - Basic hematological diagnostics
2	Anemia: general information- Aplastic anemia
2	Deficiency anemia: iron deficiency anemia, megaloblastic anemia. Chronic disease anemias
2	Hemoglobinopathies.. Haemolytic anemia
2	Oncohematological diseases. Myelodysplastic syndromes
3	Acute myeloid leukemia. Acute lymphoblastic leukemia
3	Chronic myeloproliferative neoplasms
2	Lymphadenomegaly: clinical approach and differential diagnosis.
2	Monoclonal gammopathy. Multiple myeloma
2	Waldenstrom macroglobulinemia. Amyloidosis
2	Platelet disorders. Thrombotic microangiopathies
3	Coagulation disorders. Hematopoietic stem cell transplantation. CAR-T
2	Clinical assessment Lymphadenopathy. Chronic lymphocytic leukemia. Hairy cell leukemia.

MODULE ENDOCRINOLOGY

Prof.ssa VALENTINA GUARNOTTA - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

Lombardo-Lenzi. Manuale di Endocrinologia. EdiSes

Slides fornite dal docente

AMBIT	50419-Clinica delle specialità medico-chirurgiche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Knowledge and understanding

Acquire the skills to understand the pathophysiology, biochemistry, and molecular biology of the main endocrine disorders. Understanding the technical language used.

Applying knowledge and understanding

Apply the acquired knowledge to analyze and interpret endocrine problems that patients can present. Apply the principles of evidence-based medicine in the pursuit of dietician activity

Making judgments

Know how to identify and solve patient problems using acquired knowledge and be able to formulate personal judgments to solve patient-endocrine-dietetic issues.

Communication skills

Explain to the patients in a correct manner, with particular emphasis on prevention, the need for nutritional intervention in some specific pathologies, Interact with other professional figures involved in patient care through efficient networking.

Learning ability

Ability to collect, organize and interpret correctly the informations acquired from different available resources. In particular, to integrate the information through the consultation of scientific publications in the sector, mainly through the use of computer tools (Medline, Internet).

SYLLABUS

Hrs	Frontal teaching
4	Introduction to the study of endocrinology. Historical background, concept of endocrine glands, hormones, feedback
4	Molecular action of hormones, cellular receptors, concept of second messenger, hormonal axes, Psiconeuroendocrinoimmunology
4	Diabetes mellitus: definition and classification. Physiology and pathophysiology of pancreatic insula. Molecular biology and immunopathology of DM. Clinical and therapy notes. Dietotherapy of diabetes mellitus
3	Adipose tissue, citokinic network, low-grade inflammation
3	Calcium-phosphorus disorders, definitions, physiopathology, medical therapy.
4	Thyroid: anatomy, physiology and pathophysiology. Goitre, hyperthyroidism, hypothyroidism, Hashimoto's disease, Graves' disease. The laboratory in the diagnosis of thyroid diseases, Metabolism and thyroid, Thyroid and weight.
2	Adrenal gland: anatomy, physiology, pathophysiology, main diseases. Adrenal's diseases and diagnosis
3	Hypothalamic-pituitary pathophysiology, disease and diagnosis
3	Notes on the main male and female gonadal syndromes