UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata
ACADEMIC YEAR	2021/2022
MASTER'S DEGREE (MSC)	MEDICINE AND SURGERY
INTEGRATED COURSE	PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - INTEGRATED COURSE
CODE	17453
MODULES	Yes
NUMBER OF MODULES	3
SCIENTIFIC SECTOR(S)	MED/09, MED/49
HEAD PROFESSOR(S)	BUSCEMI SILVIO — Professore Ordinario — Univ. di PALERMO
OTHER PROFESSOR(S)	LICATA ANNA — Professore Associato — Univ. di PALERMO SORESI MAURIZIO — Professore Associato — Univ. di PALERMO MANSUETO PASQUALE — Professore Associato — Univ. di PALERMO LO PRESTI ROSALIA — Professore Associato — Univ. di PALERMO GIANNITRAPANI LYDIA — Professore Associato — Univ. di PALERMO PARRINELLO GASPARE — Professore Associato — Univ. di PALERMO BUSCEMI SILVIO — Professore Ordinario — Univ. di PALERMO
CREDITS	9
PROPAEDEUTICAL SUBJECTS	05548 - GENERAL PATHOLOGY - INTEGRATED COURSE 03380 - HUMAN PHYSIOLOGY - INTEGRATED COURSE
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	1° semester
ATTENDANCE	Mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**BUSCEMI SILVIO** Tuesday 08:00 09:30 UOC di Endocrinologia, Malattie del Ricambio e della Nutrizione (piazza delle cliniche 2 - primo piano) - PREVIA RICHIESTA a silvio.buscemi@unipa.it **GIANNITRAPANI LYDIA** Friday 12:30 14:00 Clinica Medica IIPoliclinico, Palermo **LICATA ANNA** Thursday 12:00 14:00 Clinica Medica I, Dibimis **LO PRESTI ROSALIA** Wednesday 12:00 13:00 In videocomunicazione nel team "Lo Presti - ricevimento studenti" tramite il seguente link:https://teams.microsoft.com/l/team/19%3a7ea36b9decef4f75872b17fdb5d064c7%40thread.tacv2/conversations?groupId=130083c8-0c83-4751-8397-c34b149b3796&tenantId=bf17c3fc-3ccd-4f1e-8546-88fa851b **MANSUETO PASQUALE** Monday 12:00 13:00 Centro Ipertensione (Prof. GB Rini), piano -1 **PARRINELLO GASPARE** Monday 11:00 13:00 Dibimis Thursday 11:00 13:00 Dibimis **SORESI MAURIZIO** Monday 12:30 14:00 Di.Bi.M.I.S via del Vespro 141

DOCENTE: Prof. SILVIO BUSCEMI- *Sede HYPATIA*

PREREQUISITES	Adequate knowledge of anatomy and physiology of the circulatory, respiratory, endocrine, renal and gastrointestinal systems; bases of general pathology, genetics, biology, microbiology, general epidemiology, biochemistry
LEARNING OUTCOMES	Knowledge and understanding At the end of the course, students will be able to: - to know the theoretical principles underlying the clinical method and based medicine on the evidence -know how to correctly perform a complete medical history, which includes also the social context in which the patient lives -knowing how to relate to the patient in the most varied environmental conditions, both in election that in urgency -know how to perform a correct and complete physical examination of the patient, which includes both general and systemic aspects as well as individual organs and systems -be able to approach patients with the following signs and syndromes: digestive bleeding, acute abdominal pain, pain thoracic, jaundice, dyspnoea, changes in diuresis, urination and bone -knowing how to critically detect and interpret the main symptoms and signs e identify the most correct and appropriate clinical diagnostic path e instrumental Ability to apply knowledge and understanding Students will be able to integrate acquired knowledge with an attitude critic oriented to the resolution of identification, diagnostic and therapeutic questions, by choosing the most suitable clinical and laboratory methodologies. Autonomy of judgment Students will be able to evaluate them in a rational and autonomous way knowledge provided by the course and will be able to set a reasoning clinical based on the evidence and information derived from the physical examination of the patient. Learning skills Ability to continuously update through the knowledge of the modalities of consultation and interpretation of information sources (publications scientific data, databases and IT resources) Communication skills Acquisition of communication skills gained through the oral exam e the habit of presenting in public the clinical experiences acquired during the Internship. Students will be able to apply and clearly convey the knowledge acquired in verbal form. Learning skills Ability to continuously update through the knowledge of the modalities of consultation of information sources (scientific publications, databases and IT resources) related to clinical medicine applied to the topics of research and diagnosis of the medical sector.
ASSESSMENT METHODS	Assessment of knowledge of curricular contents by oral exam aimed at verifying the possession of disciplinary skills and knowledge achieved. The oral exam consists of an interview generally lasting 20-30 minutes aimed at ascertaining the disciplinary knowledge of the program. There evaluation is expressed in thirty. Below is the diagram of evaluation: a) 30-30 cum laude Excellent knowledge of the contents teaching; the student demonstrates high analytical-synthetic ability and is able to apply knowledge to solve high problems complexity; b) 27-29 Excellent knowledge of the teaching contents e excellent language properties; the student demonstrates analytical-synthetic ability and is able to apply knowledge for solve problems of medium complexity and, in some cases, even high; c) 24-26 Good knowledge of the teaching contents and good ownership of language; the student is able to apply knowledge to solve problems of medium complexity; d) 21-23 Fair knowledge of the contents teaching, in some cases limited to the main topics; acceptable ability to use the specific language of the discipline and to apply independently the acquired knowledge; e) 18-20 Minimum knowledge of teaching content, often limited to the main topics; modest ability to use the specific language of the discipline and to apply independently acquired knowledge Insufficient; f) He does not own one acceptable knowledge of the main teaching contents; very little or no ability to use the specific language of the discipline and to apply autonomously the acquired knowledge. The final grade comes from the arithmetic average of the marks obtained in the

	two modules of the integrated course.
TEACHING METHODS	Frontal lessons

DOCENTE: Prof. SILVIO BUSCEMI- *Sede IPPOCRATE*

PREREQUISITES	Adequate knowledge of anatomy and physiology of the circulatory, respiratory, endocrine, renal and gastrointestinal systems; bases of general pathology, genetics, biology, microbiology, general epidemiology, biochemistry
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TEACHING METHODS	Frontal lessons

DOCENTE: Prof. SILVIO BUSCEMI- *Sede CHIRONE*

PREREQUISITES	Adequate knowledge of anatomy and physiology of the circulatory, respiratory, endocrine, renal and gastrointestinal systems; bases of general pathology, genetics, biology, microbiology, general epidemiology, biochemistry
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	two modules of the integrated course.
TEACHING METHODS	Frontal lessons

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE II

Prof. GASPARE PARRINELLO - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

Pontieri
Fisiopatologia Generale
McCance KL
Fisiopatologia ed elementi di Patologia Generale
Macleod
Manuale di semeiotica e metodologia medica
Harrison's
Principi di Medicina Interna -
McCance
Fisiopatologia ed elementi di patologia generale. EDRA

AMBIT	50416-Clinica generale medica e chirurgica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Based on the knowledge of the biochemical mechanisms of the functioning of the organs and the alterations of these mechanisms, the student will have to understand, and recognize, in the specific conditions, the macroscopic causes of the alterations of the organs and systems involved in the disease under investigation. In addition, the student will be instructed to collect general anamnestic information, define the symptoms, set clinical problems, compile the clinical documents (folder etc.) and to know and perform the semeiological maneuvers of the single apparatuses useful for the definition, through the signs of the patient's health and / or disease conditions and to interpret the data in the light of the scientific evidence available according to the evidence-based methodology of medicine. The specific objective of the module will be to deepen the themes of clinical physiopathology with reference to pathologies of general and international interest and to integrate the information acquired with an evidence-based methodology scientific information available. Thus the various phases of the clinical approach will be analyzed, from the evaluation of symptoms and signs to biochemical and instrumental support in order to introduce the student to ways of recognizing pathologies. For such reason through the knowledge of the general pathophysiology and of the single apparatuses, in the light of the definition of the mechanisms pathogenetic of individual diseases, the student will have to carry out an initial process of clinical reasoning in order to understand the superficial mechanisms of the diagnostic procedure.

SYLLABUS

Hrs	Frontal teaching
2	introduction to the course, concept of health and disease, the fever
2	endothelium and endothelial function
2	anamnesis
2	physical examination and medical record
2	pathophysiology of ischemic heart disease
2	pathophysiology of arterial hypertension
2	pathophysiology of heart failure and structural remodeling
2	pathophysiology of liver cirrhosis
2	abdominal semeiotics
2	pathophysiology of electrolyte disorders
2	pathophysiology and methodology of the respiratory system
2	pathophysiology of renal failure

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE I

Prof. MAURIZIO SORESI - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

Metodologia clinica – B. Tarquini-Il nuovo Rasario (Idelson) - R.Nuti- Semeiotica medica (Minerva medica) EBM - L.Pagliaro-Medicina basata sulle evidenze (Il Pensiero Scientifico) - L. Pagliaro et al- La Diagnosi in medicina (Cortina Editore) - Lisa Sanders-Ogni paziente racconta la sua storia (Einaudi)

AMBIT	50416-Clinica generale medica e chirurgica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The course of Medical Methodology is aimed to help the student to develop a method of reasoning and work based on scientific evidences and the rational and critical use of information collected through patient physical examination, instrumental and laboratory methodologies together with the literature data (traditional and computer updating sources). The acquisition of the clinical method will allow the student to critically organize the basic knowledge already acquired and those he/she will learn in the clinical triennium of the School of medicine in order to formulate a diagnosis and decide for evidence based treatments.

SYLLABUS

Hrs	Frontal teaching
2	Aims of the the clinical methodology. Doctor-patient communication. Clinical history as diagnostic tool
2	Oriented clinical record. General clinical examination
2	Clinical diagnosis
2	Clinical judgement
2	The medical error
2	Cardiovascular clinical examination
2	Chest examination
2	Abdomen examination
2	Mental status evaluation and neurologic clinical exam
2	Clinical methodology of kidney diseases: acute and chronic renal failure
2	Clinical methodology approach to anemias
2	Clinical methodology of lipid transport disorders
2	Methodological approach to daibtes and its complications: diabetic ketoacidosis, hyperglycemic hyperosmolar state. Gestational diabetes
2	Approach to disorders of Acid-Base Balance
2	Methodological approach to rare diseases

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE II

Prof. PASQUALE MANSUETO - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

Harrison's : Principi di Medicina Interna - Ed. McGraw Hill
C. Rugarli: Medicina Interna Sistematica - Ed. Masson
Pontieri: Fisiopatologia – Ed. Piccin

AMBIT	50416-Clinica generale medica e chirurgica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The student will understand and recognize the causes and dynamics of changes in organs and systems involved in the disease. The student will use the knowledge of the biochemical and biophysical mechanisms of functioning of organs, as well as the knowledge gained from physiology. In particular, the student must acquire the ability to recognize the ways that cause the development of alterations in different organs and systems. The student will know to explain why the symptoms, signs, clinical manifestations, natural history and evolution of the complications of the individual diseases. The student will also have the opportunity to understand the mechanisms of action of pharmacological and non-pharmacological therapeutic measures.

SYLLABUS

Hrs	Frontal teaching
4	The Hyponatremia. The Hypernatremia.. Edema. Renal impairment. Acute Renal Failure. Chronic Renal Failure.
4	Causes and mechanisms of Heart Failure. Pathophysiology of pulmonary edema. Effects of Heart Failure on the different organs and apparatus.
4	Arterial hypertension. Atherosclerosis. Complications of atherosclerosis.
4	Causes and mechanisms of liver disease. The Hepatic Insufficiency. Hepatic Fibrosis. The Liver Cirrhosis.
3	The acid-base balance. Alterations in calcium-phosphorus metabolism.
4	Diabetes mellitus. Pathogenetic mechanisms of diabetes type 1 and type 2. Complications of diabetes mellitus.
3	Regulation of the endocrine system. Alterations in the production and metabolism of peptide hormones and steroid hormones.

MODULE
APPLIED DIETETIC TECHNICAL SCIENCES

Prof. SILVIO BUSCEMI - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Dispense; selezione di articoli della letteratura scientrifica
Riccardi, Pacioni, Giacco, Rivellesei: Manuale di nutrizione applicata Edizione Idelson Gnocchi.
Elia, Ljungqvist, Stratton, Lanham-New: Nutrizione Clinica. Editrice Ambrosiana
.

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

EDUCATIONAL OBJECTIVES OF THE MODULE

The aim of the course aims is to provide knowledge about the relationships between diet, lifestyle and the main diseases of interest for dissemination, including the aspects of pathophysiology, diagnostic methods and treatment in the clinical nutrition field.
The course also aims to provide the cultural tools, including survey methodologies and data communications, for activities intervention in nutrition comprehensive of educational programs and campaigns aimed at promoting healthy lifestyles.

SYLLABUS

Hrs	Frontal teaching
1	The concept of Diet - Nutrition, diet and nutrigenomics (the genotype-environment-food interaction) - The eating in the cultural evolution of man. Biosocial approach to diet (the street food phenomenon)
1	The body size, measures of adiposity, measures of of body fat distribution (main methods)
2	Body composition (two- , three-, four- compartments models). Methods of assessing body composition (hydrostatic weighing, skinfold thickness, impedance, isotope dilution methods, DEXA). Bioelectric phase angle, impedance vector analysis (BIVA).
1	Body fat: fat distribution profiles and clinical and nutritional significance. Methods for the assessment of body fat distribution (body circumferences, ultrasound, CT, NMR)
2	Areas of particular interest in clinical nutrition: definitions and objectives (hypertension, type 1 diabetes, type 2 diabetes, dyslipidemia, metabolic syndrome, insulin resistance, renal failure).
1	Nutrients and nutritional needs; definition of nutritional adequacy; the RDAs. The nutrients and energy substrates (carbohydrates, lipids, proteins, alcohol). Certain foods (nutritional characteristics and properties): meat, fish, oil and fat dressing, wine, dairy products, fruits and vegetables, bread, pasta and cereals)
2	The energy balance and its components: the intake and appetite control, the expenditure (resting energy expenditure and basal metabolism, diet-induced thermogenesis and post-prandial thermogenesis, regulatory thermogenesis, adaptive thermogenesis, physical activity and exercise thermogenesis). The concept of "set-point energy gap". Mechanisms of increased energy efficiency. Adipose tissue trans-differentiation and brown adipose tissue, the FTO gene, the Irisin
1	Methods for the assessment of energy intake. Diet history: a) detection techniques of food consumption (the methods of record and recall), b) the food frequency questionnaires (FFQ for the local population)
1	Methods for measurement of energy expenditure: direct and indirect calorimetry, pedometer, questionnaires. Predictive equations for estimating energy expenditure.
2	the metabolic fate of foods. oxidative and non-oxidative utilization of energy substrates (the Respiratory Quotient and Respiratory Quotient not Protein).
2	Mechanisms mediating the interaction diet-diseases with special reference to diabetes, atherosclerotic cardiovascular disease, cancer. Oxidative stress, anti-oxidants, endothelial function, aging. The dietary anti-oxidants (coffee, tea, chocolate, vegetables, fruit, wine)
1	quality nutritional indices. The glycemic index of foods and the glucose load (definitions, methods, clinical implications)
2	Modern dietetics, some studies: Seven Country Study and the Mediterranean Diet, the Diabetes Prevention Program (DPP) and the Medical Nutritional Treatment, The Lyon Heart Study, the PREDIMED study, the EPIC study.
2	The model of the Mediterranean Diet. Diets (low calorie, low sugar, low fat, low protein, DASH, celiac disease, lactose-intolerant people). The chetogenic diet
1	Obesity. The ABCD project (Diet, Cardiovascular Wellness and Diabetes).
2	Effectiveness of medical-nutritional treatment of obesity (short, medium and long term success predictors). The drugs in the treatment of obesity, new evidence: the study SCALE.
1	Strategies of nutritional intervention in the population: The case homocysteine: risk of thrombosis, dementia,fractures The case of iodine: risk of goitre

1	The sarcopenic syndrome and syndrome of fragility in the elder. Malnutrition and cachexia.
4	Hospital malnutrition. Artificial nutrition (Enteral and parenteral nutrition); PEG, venous access; caracteristics of AFMS for enteral nutrition. Nutrition in oncology; refeeding syndrome, short bowel syndrome, dumping syndrome.

MODULE
APPLIED DIETETIC TECHNICAL SCIENCES

Prof. SILVIO BUSCEMI - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

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Prof. SILVIO BUSCEMI - Sede IPPOCRATE, - Sede IPPOCRATE

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1	Obesity. The ABCD project (Diet, Cardiovascular Wellness and Diabetes).
2	Effectiveness of medical-nutritional treatment of obesity (short, medium and long term success predictors). The drugs in the treatment of obesity, new evidence: the study SCALE.
1	Strategies of nutritional intervention in the population: The case homocysteine: risk of thrombosis, dementia,fractures The case of iodine: risk of goitre

1	The sarcopenic syndrome and syndrome of fragility in the elder. Malnutrition and cachexia.
4	Hospital malnutrition. Artificial nutrition (Enteral and parenteral nutrition); PEG, venous access; caracteristics of AFMS for enteral nutrition. Nutrition in oncology; refeeding syndrome, short bowel syndrome, dumping syndrome.

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE I

Prof.ssa ANNA LICATA - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Pontieri Fisiopatologia Generale ISBN: 978-88-299-2963-4
McCance KL Fisiopatologia ed elementi di Patologia Generale ISBN: 8821441431
Harrison's Principi di Medicina Interna -ISBN: 8808820378
Rugarli. Medicina interna sistematica- ISBN: 8821450953
Macleod Manuale di semeiotica e metodologia medica ISBN: 8821438465
Fradà G Semeiotica medica nell' adulto e nell' anziano - Metodologia clinica ed esplorazione morfofunzionale ISBN: 8829928895
Jarvis Esame obiettivo e valutazione clinica ISBN: 9788829931439

AMBIT	50416-Clinica generale medica e chirurgica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Based on the knowledge of the biochemical mechanisms of the functioning of the organs and the alterations of these mechanisms, the student will have to understand, and recognize, in the specific conditions, the macroscopic causes of the alterations of the organs and systems involved in the disease under investigation. In addition, the student will be instructed to collect general anamnestic information, define the symptoms, set clinical problems, compile the clinical documents (folder etc.) and to know and perform the semeiological maneuvers of the single apparatuses useful for the definition, through the signs of the patient's health and / or disease conditions and to interpret the data in the light of the scientific evidence available according to the evidence-based methodology of medicine. The specific objective of the module will be to deepen the themes of clinical physiopathology with reference to pathologies of general and international interest and to integrate the information acquired with an evidence-based methodology scientific information available. Thus the various phases of the clinical approach will be analyzed, from the evaluation of symptoms and signs to biochemical and instrumental support in order to introduce the student to ways of recognizing pathologies. For such reason through the knowledge of the general pathophysiology and of the single apparatuses, in the light of the definition of the mechanisms pathogenetic of individual diseases, the student will have to carry out an initial process of clinical reasoning in order to understand the superficial mechanisms of the diagnostic procedure.

SYLLABUS

Hrs	Frontal teaching
2	Introduction to the course, concept of health and disease
2	Pathophysiology of atherosclerotic cardiovascular disease,
2	Pathophysiology of blood pressure control; arterial hypertension, arterial hypotension
2	Pathophysiology of ischemic heart disease; from angina pectoris to myocardial infarction. the ischemic cascade
2	Pathophysiology of heart valve defects
2	Pathophysiology of heart failure and structural remodelling, cardiovascular adaptation mechanisms
2	Pathophysiology of main pulmunary diseases; pneumonia and ventilatory disorders
2	Pathophysiology of the gastrointestinal tract and malabsorption conditions
2	Pathophysiology of the liver cirrhosis and its complications. Acute liver failure
2	The pathophysiology of acute and chronic renal failure; acid base balance
2	Pathophysiology of hydroelectrolytic disorders and acid-base balance
2	The pathophysiology of type I and II diabetes. Insulin resistance and the MAFLD.
2	Pathophysiology of anemias
2	Pathophysiology of the of the main endocrine glands: thyroid, adrenal gland
2	The physiopathological mechanisms of shock

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE I

Prof.ssa LYDIA GIANNITRAPANI - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

Graham Douglas, Fiona Nicol, Colin Robertson. Macleod, Manuale di Semeiotica e Metodologia Medica. Tredicesima edizione. Edizioni Edra

AMBIT	50416-Clinica generale medica e chirurgica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Starting from the knowledge of the biochemical and biophysical mechanisms of the organs' functions and the alterations of these "microscopic" or "basic" mechanisms, the student will understand, and acknowledge, in the specific practical conditions, the causes of macroscopic changes in organs and systems involved in the disease object of investigation.
In addition, the student is instructed to ascertain the general medical history information, to define the symptoms, set the clinical problems compiling medical records and to learn and perform the semiotic maneuvers of the individual apparatus useful for the definition, through the clinical signs, of the state of health and/or disease of the subject as well as to interpret the data in the light of available scientific evidence according to the methodology of the evidence-based medicine.
A module-specific objective will be to study issues of clinical methodology in terms of diseases of general and internal medicine interest and to integrate information acquired through a methodology based on available scientific evidence.
Individual clinical approach phases, evaluation of symptoms and signs, biochemical and instrumental support will be analyzed in order to introduce the students to the methods of recognition of the diseases that they have already studied in previous courses. For this reason, through the knowledge of the general methodology and of the individual apparatus, in the light of the definition of the pathogenic mechanisms of the individual diseases, the student, should start an initial clinical reasoning process in order to understand the surface mechanisms of the diagnostic workup.

SYLLABUS

Hrs	Frontal teaching
2	Kidney diseases semiotics and methodology. History oriented to kidney diseases. Urine analysis and interpretation of urine and sediment characteristics.
3	Respiratory diseases semiotics and methodology: History oriented to respiratory disorders. Physical examination of the thoracic region: inspection, palpation, percussion and auscultation. Notes on laboratory and instrumental methods useful in the diagnosis of respiratory disorders.
4	The history: Family, Personal physiological, occupational, pathological General physical examination. Facies, decubitus, sensory, general somatic conformation, nutrition and hydration status, state of blood formation, skin pigmentation, skin annexes, superficial lymph node apparatus, osteoarticular apparatus, trophism and muscular tone.
2	Signs and symptoms. Fever, pain, coughing, cyanosis, edema, dyspnea, dysphagia, vomiting, diarrhea, etc. The clinical diagnosis. The oriented to problems medical record.
3	Hypertension. Semiotics of vessels and peripheral pulses. Notes on laboratory and instrumental methods useful in the diagnosis of cardiovascular diseases.
3	Semiotics and methodology of metabolic diseases. Diabetes, dyslipidemia, gout.
3	Symptomatology and cardiovascular methodology. History oriented to the cardiovascular diseases. Physical examination of the precordial region: inspection, palpation, percussion and auscultation.
3	Gastrointestinal tract and liver diseases semiotics and methodology. Jaundice, ascites, portal hypertension. Physical examination of the abdominal region: inspection, palpation, percussion and auscultation. Notes on laboratory and instrumental methods useful in the diagnosis of liver diseases with particular reference to cirrhosis and its complications.
2	Endocrin diseases semiotics and methodology: anterior pituitary, thyroid and parathyroid, adrenal cortex and the adrenal medulla disorders.
2	Semiotics of the haemopietic organs. Analysis of the signs and symptoms of anemia, polycythemia, mieloproliperative and lymphomatous conditions. Critical exam of the blood count analysis.
3	The Evidence Based Medicine-EBM

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE II

Prof.ssa ROSALIA LO PRESTI - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Rugarli. Medicina interna sistematica. Ottava edizione (2021).Editore:Edra - Masson. ISBN:9788821450952
KL. McCance: Fisiopatologia ed elementi di patologia generale. Editore: Edra (2016)
Harrison. Principi di medicina interna. Ventesima edizione (2021). Editore CEA. ISBN9788808820372

AMBIT	50416-Clinica generale medica e chirurgica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Starting from the knowledge of biochemistry, anatomy and physiology, the student must learn the pathophysiological mechanisms of the most common internal diseases. Moreover, he must learn from these knowledge to understand the symptoms they cause

SYLLABUS

Hrs	Frontal teaching
2	Pathophysiology of edema, effusions (ascites and pleural effusion). Edematous and anasarca states. Nephrotic syndrome
2	Causes and mechanisms of liver disease. Liver failure. Jaundice. Mechanisms of development and progression of Steatosis (alcoholic and non-alcoholic)
2	Acute and chronic hepatitis, liver fibrosis and cirrhosis. Complications of liver cirrhosis: ascites
2	Pathophysiology of malabsorption and maldigestion syndromes. Acute and chronic pancreatitis.
2	Causes of Respiratory Failure; pathophysiology of respiratory insufficiency blood gas analysis
3	Pathophysiology of: Obstructive bronchopneumopathies (asthma, chronic bronchitis, emphysema), Restrictive bronchopneumopathies; Alterations in "ventilation", "perfusion" and "diffusion". Pulmonary hypertension, chronic pulmonary heart. Pathophysiology of pulmonary embolism
2	Hypertension; arteriosclerosis and atherogenesis; effects of atherosclerosis on the vascular system
2	Ischemic heart disease, myocardial infarction and its complications. Causes and pathophysiology
3	Causes and pathophysiology of heart failure, and pulmonary edema. Effects of heart failure on various organs and systems. Non-cardiogenic pulmonary edema.
4	Diabetes Mellitus type I and II and its complications
3	Pathophysiology of acute and chronic renal failure. Hydroelectrolytic disorders
2	Anemias
1	The fever