



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2017/2018		
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)	AVERNA MAURIZIO	Professore Ordinario	Univ. di PALERMO
	RIZZO MANFREDI	Professore Ordinario	Univ. di PALERMO
	PINTO ANTONIO	Professore a contratto in quiescenza	Univ. di PALERMO
OTHER PROFESSOR(S)	AVERNA MAURIZIO	Professore Ordinario	Univ. di PALERMO
	LO PRESTI ROSALIA	Professore Associato	Univ. di PALERMO
	MANSUETO PASQUALE	Professore Associato	Univ. di PALERMO
	GIANNITRAPANI LYDIA	Professore Associato	Univ. di PALERMO
	PARRINELLO GASPARE	Professore Associato	Univ. di PALERMO
	TUTTOLOMONDO ANTONINO	Professore Ordinario	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	<p>AVERNA MAURIZIO Thursday 12:00 14:00 U.O.C. di Medicina Clinica, Respiratoria e delle Urgenze</p> <p>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</p> <p>GIANNITRAPANI LYDIA Friday 12:30 14:00 Clinica Medica IIPoliclinico, Palermo</p> <p>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.tacv.conversations?groupId=130083c8-0c83-4751-8397-c34b149b3796&tenantId=bf17c3fc-3ccd-4f1e-8546-88fa851f</p> <p>MANSUETO PASQUALE Monday 12:00 13:00 Centro Ipertensione (Prof. GB Rini), piano -1</p> <p>PARRINELLO GASPARE Monday 11:00 13:00 Dibimis Thursday 11:00 13:00 Dibimis</p> <p>PINTO ANTONIO Thursday 09:00 10:00 Istituto ex Clinica Medica I, ingresso da Piazza delle Cliniche 2</p>		

	PINTO ANTONIO			
	RIZZO MANFREDI			
	Monday	12:00	13:00	presso la mia stanza sita nel Dipartimento DIBIMIS, previo conferma telefonica al numero 091.6552945
	TUTTOLOMONDO ANTONINO			
	Friday	11:00	12:00	ex istituto di Clinica Medica, Piazza delle Cliniche n. 2, secondo piano(per informazioni rivolgersi al punto giallo in portineria)

PREREQUISITES	The student must have acquire a suitable knowledge of the disciplines of base that you/they form the medical (biology, genetics, chemistry, medical physics) knowledge, with particular reference to the physiology and the general pathology.
LEARNING OUTCOMES	<p>Knowledge and ability of understanding</p> <ul style="list-style-type: none"> • To know how to interpret the morfo-functional anomalies of the organism that find him in the different illnesses. • To know how to individualize the normal and abnormal human behavior. • To know the determinants and the main risk factors of the health and the illness and the interaction among the man and the physical-social environment. • To know the molecular, cellular, biochemists and physiological mechanisms that maintain the omeostasis of the whole body • To know the etiology and the natural history of the acute and chronic illnesses. <p>Ability to apply knowledge and understanding</p> <ul style="list-style-type: none"> • To know how to correctly perform a suitable clinical history, that also understands social aspects as the occupational health. • Being able to perform the diagnostic procedures and techniques of base, to know how to analyze of it and to interpret the results to the purpose to correctly define the nature of a problem. • To recognize every condition that puts in imminent danger the life of the patient • To know how to manage the patients in effective way, efficient and ethics, promoting the health and avoiding the illness. • To know how to correctly appraise the problems of the health and to know how to recommend the patients considering physical, psychic, social and cultural factors • To know the appropriate use of the human resources, of the diagnostic interventions, of the formalities' therapeutics and of the technologies devoted to the care of the health. • To know the principal conclusive factors of the health and the illness, what the style of life, the genetic, demografic, environmental, partner-economic, psychological and cultural factors in the complex of the population. • To know the bases for being able to assume correct decisions, when necessary, in the problem list related to the care of the health. <p>Autonomy of judgment</p> <ul style="list-style-type: none"> • To show a critical approach, a constructive skepticism, creativeness' and an attitude directed to the search, in the carrying out of the activities' professional. • To understand the importance and the limitations of the based scientific thought on the information gotten by different resources to establish the cause, the treatment and the prevention of the illness. • Being able to formulate personal judgments to resolve the analytical and critical ("problem solving") problems and to know how to autonomously seek the scientific information, without waiting that it is furnished them. • To identify, to formulate and to resolve the problems of the patient using the bases of the thought and the scientific search and on the base of the gotten information and correlated by different sources • Being able to formulate some hypotheses, to pick up and to appraise in way criticizes the data to resolve the problems. • To know how to identify the essential elements of the medical profession, included the moral and ethical principles and the responsibilities' legal that are at the base of the profession. • To be Conscious of the need of a continuous professional improvement with the awareness of ones own limits, inclusive those of the own medical knowledge • To acquire the sense of responsibility' personal in to take care of the single patient. <p>Communication skills</p> <ul style="list-style-type: none"> • To attentively listen for understanding and to synthesize the remarkable information on all the problem list, understanding their contents of it. • To communicate in effective way both to oral level that in form writing. • To know how to reassume and to introduce the appropriate information to the needs of the audience, and to know how to discuss plain about action attainable and acceptable that represents some priorities' for the individual and for the community <p>Learning skills</p> <ul style="list-style-type: none"> • Being able to pick up, to organize and to correctly interpret the sanitary and biomedical information from the different resources and database available • To know how to pick up the specific information about the patient from the systems of management of clinical data. • To know how to manage a good database of own medical practice for one following analysis of his and improvement
ASSESSMENT METHODS	

	<p>Oral examination - The student must have acquired a suitable knowledge of the basic disciplines of the medical knowledge (biology, genetics, chemistry, medical physics), with particular reference to the physiology and the general pathology. The final evaluation is expressed in 30 - Lower vote to pass the exam is 18/30.</p> <p>30/30 with honours: Excellent knowledge of the contents of the teaching; the student shows elevated analytical-synthetic capacity and is able to apply the knowledges acquired to resolve problems of elevated complexity</p> <p>27-29: Good knowledge of the contents of the teaching and good ownership' of language; the student shows analytical-synthetic capacity and is able to apply the knowledges acquired to resolve problems of complexity' average and, in some cases, also elevated</p> <p>24 -26: Good knowledge of the contents of the teaching and good person ownership' of language; the student is able to apply the knowledges acquired to resolve problems of average complexity</p> <p>21-23: sufficient knowledge of the contents of the teaching, in some cases limited to the principal matters; acceptable capacity to use the specific language of the discipline and to autonomously apply the acquired knowledges</p> <p>18 -20: Minimal knowledge of the contents of the teaching, often limited to the principal matters; modest capacity to use the specific language of the discipline and to autonomously apply the acquired knowledges</p>
TEACHING METHODS	Oral lessons

PREREQUISITES	Adequate knowledge of the anatomy and physiology of circulatory, respiratory, endocrine, renal and gastrointestinal systems; Basics of general pathology, genetics, biology, microbiology, general epidemiology.
LEARNING OUTCOMES	<p>Knowledge and understanding</p> <p>After completing the course, students will be able to:</p> <ul style="list-style-type: none">- to know the principles of clinical evidence and evidence-based medicine- to properly assess a complete clinical history, including the collection of information on the social context in which the patient lives- to approach the patient in different environmental conditions, both in non urgent and urgent care settings- to perform a comprehensive and accurate physical exam focusing on individual organs and apparatus- be able to approach patients with the following signs and syndromes: digestive hemorrhage, acute abdominal pain, chest pain, jaundice, dyspnoea, disturbances of diuresis, urination, and alvus- to critically distinguish and interpret symptoms and signs in order to identify the most appropriate clinical and instrumental diagnostic approach <p>Making judgments</p> <p>Students will be able to evaluate in a logical and autonomous manner the knowledge provided by the course and will be able to face different issues related to clinical reasoning through an evidence based approach and the information derived from the physical examination of the patient</p> <p>Communication</p> <p>Acquisition of communicative skills acquired through the oral examination and the public presentation of clinical experiences acquired during the internship. Students will apply and clearly convey the acquired knowledge in verbal form.</p> <p>Learning skills</p> <p>Ability of continuous learning through the consultation of information resources (scientific publications, databases and IT resources) in the field of clinical medicine.</p>
ASSESSMENT METHODS	<p>Evaluation of the knowledge through oral examination.</p> <p>The oral exam consists in general of 20-30 minute interview aimed at evaluate the knowledge of the program of the courses. The evaluation is expressed in a grading scale up to thirty. The evaluation scheme is as follow: a) 30 and 30 cum laude, excellent knowledge of the contents of the courses; The student demonstrates high analytical-synthetic capabilities and is able to apply the acquired knowledge for solving problems of high complexity; b) 27-29, excellent knowledge of the teaching content and excellent language skills; The student demonstrates analytical-synthetic skills and can apply knowledge to solve complex problems;</p> <p>c) 24-26, good knowledge of teaching content and good language skills; The student is able to solve problems of medium complexity; d) 21-23, Discreet knowledge of the content of teaching, in some cases limited to the main topics; Acceptable ability to use the specific language of the disciplines and to apply the acquired knowledge independently; E) 18-20, Minimum knowledge of the content of teaching, often limited to the main topics; Modest ability to use the specific language of the discipline and low grade of autonomy; F) Does not have an acceptable knowledge of the main contents of the teaching; Very little or no ability to use the specific language of the discipline and to apply the acquired skills independently.</p> <p>The final mark is the arithmetic mean of the marks of the two teaching modules</p>
TEACHING METHODS	Frontal lessons; ward internship

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE I

Prof. ANTONINO TUTTOLOMONDO - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

Harrison Principi di medicina interna

Pontieri Patologia generale 2: Fisiopatologia

Teodori Trattato Italiano di Medicina Interna Ed. SEU

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

EDUCATIONAL OBJECTIVES OF THE MODULE

Objective of the module is to explain to the student the principles of the pathophysiology of the main human diseases. The lessons are focused on discussing and analysing the pathologic basis of the main human diseases and the basic alterations leading to signs and symptoms of medical interest.

Other objective is to learn to the student to perform the reverse process, that is to start from the study of the morpho-functional alterations found during the clinical course of the various pathologic conditions, interpreting them in the correct way.

SYLLABUS

Hrs	Frontal teaching
8	Pathophysiology of blood pressure control; Essential hypertension; Secondary hypertension; organ damage due to high blood pressure
4	Pathophysiology of Inherited and acquired bleeding disorders. The Coagulation cascade. Abnormalities of platelet count and function. Trombosis, embolism and their related damage
10	Pathophysiology of atherosclerosis. Distrectual disease due to atherosclerotic damage (stroke, myocardial infarction, peripheral artery disease)
4	Pathophysiology of shock
2	Pathophysiology of anemia. Blood red cell count, classification and pathophysiology of conditions leading to anemia.
2	Pathophysiology of thyroid and para-thyroid dysfunction. Metabolism of thyroid hormones; hypothyroidisms, hyperthyroidisms

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE II

Prof. GASPARE PARRINELLO - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

HARRISON PRINCIPI DI MEDICINA INTERNA
PONTIERI PATOLOGIA GENERALE 2: FISIOPATOLOGIA

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

EDUCATIONAL OBJECTIVES OF THE MODULE

To teach the pathophysiological fundamentals (knowledge based mainly on disease mechanisms) and the experimental basis of the pathological processes of medical interest.

Knowing how to interpret the morphological and functional abnormalities of the organism that are found in different diseases.

SYLLABUS

Hrs	Frontal teaching
2	concepts of health and disease; the etiology and pathogenesis
2	Causes and mechanisms of edema and ascites formation
2	the molecular basis and pathophysiological mechanisms of Atherosclerosis disease
2	endothelial pathophysiology and its role in cardiovascular disease
2	pathophysiology of ischemic heart disease
2	pathophysiology of hypertension
2	cardiovascular adaptation mechanisms; cardiac and vascular hypertrophy
2	the pathophysiological mechanisms of shock
2	the pathophysiological mechanisms responsible for Anemia
2	pathophysiology of type II diabetes, metabolic consequences of insulin deficiency
2	pathophysiology of type II diabetes; hyperinsulinemia and insulin resistance
2	the pathophysiological mechanisms of renal failure
2	the liver disease pathophysiology
2	the pathophysiological mechanisms of shock
2	the pathophysiological mechanisms of respiratory insufficiency

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE I

Prof. MAURIZIO AVERNA - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Metodologia clinica
 –B. Tarquini-II 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
2	Logic in medicine
2	Doctor-patient communication
2	Oriented clinical record
2	EBM (Evidence Based Medicine)
2	Reading and interpretation of scientifc paper
2	Clinical history
2	General clinical examination
2	Cardiovascular clinical examination
2	Chest examination
2	Abdomen examination
2	Mental status evaluation and neurologic clinical exam
2	Clinical diagnosis
2	Clinical judgement
2	The medical error

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 Sistemica - 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 scientifica
Binetti, Marcelli, Baisi: Manuale di nutrizione clinica e scienze dietetiche applicate Edizione SEU.
Liguri: Nutrizione e dietologia. Zanichelli.

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
2	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 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). 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)
2	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)
3	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).
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	The ABCD project (Diet, Cardiovascular Wellness and Diabetes).
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.

MODULE
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Prof. SILVIO BUSCEMI - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

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MODULE
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Prof. SILVIO BUSCEMI - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

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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.

1	Hospital malnutrition. Enteral and parenteral nutrition. Nutraceutical: the 'healing food'.
<p style="text-align: center;">MODULE PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE I</p> <p style="text-align: center;"><i>Prof.ssa LYDIA GIANNITRAPANI - Sede HYPATIA, - Sede HYPATIA</i></p>	
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	
<p>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.</p>	

SYLLABUS

Hrs	Frontal teaching
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	Symptomatology and cardiovascular methodology. History oriented to the cardiovascular diseases. Physical examination of the precordial region: inspection, palpation, percussion and auscultation.
3	Hypertension. Semiotics of vessels and peripheral pulses. Notes on laboratory and instrumental methods useful in the diagnosis of cardiovascular diseases.
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.
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	Kidney diseases semiotics and methodology. History oriented to kidney diseases. Urine analysis and interpretation of urine and sediment characteristics.
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, mieloproliferative and lymphomatous conditions. Critical exam of the blood count analysis.
3	Semiotics and methodology of metabolic diseases. Diabetes, dyslipidemia, gout.
3	The Evidence Based Medicine-EBM

MODULE
PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - MODULE II

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

SUGGESTED BIBLIOGRAPHY

Harrison - Principi di Medicina Interna - Ed. McGraw-Hill
 Tarquini - Il Nuovo Rasario. Semeiotica e Metodologia Medica - Ed. Idelson
 Frada' & Frada' - Semeiotica medica nell'adulto e nell'anziano - Ed. Piccin

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

EDUCATIONAL OBJECTIVES OF THE MODULE

At the end of the course, the student will have acquired knowledge about the general principles of history taking and clinical examination, with reference to internal medicine.

During the course, particular attention will be given to the pathophysiology and methodological approach in the following clinical conditions:

Cardiovascular diseases

Respiratory diseases

Anemia

Renal diseases

Hepatic diseases

SYLLABUS

Hrs	Frontal teaching
6	History taking and clinical examination in internal medicine. General principles of the methodological approach to internal diseases
8	Clinical examination and methodological approach to the most common cardiovascular diseases
6	Clinical examination and methodological approach to respiratory diseases
4	Clinical examination and methodological approach to anemia
4	Clinical examination and methodological approach to kidney diseases
2	Clinical examination and methodological approach to the most common hepatic diseases