

# UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"		
ACADEMIC YEAR	2023/2024		
BACHELOR'S DEGREE (BSC)	NURSING		
INTEGRATED COURSE	IMTERNAL MEDICINE, GASTROENTEROLOGY AND PHARMACOLOGY - INTEGRATED COURSE		
CODE	21846		
MODULES	Yes		
NUMBER OF MODULES	3		
SCIENTIFIC SECTOR(S)	MED/09, BIO/14, MED/12	2	
HEAD PROFESSOR(S)	CORRAO SALVATORE	Professore Ordinario Univ. di PALERMO	
	SORESI MAURIZIO	Professore Associato Univ. di PALERMO	
OTHER PROFESSOR(S)	BRANCATO ANNA	Ricercatore a tempo Univ. di PALERMO determinato	
	CORRAO SALVATORE	Professore Ordinario Univ. di PALERMO	
	CABIBBO GIUSEPPE	Ricercatore a tempo Univ. di PALERMO determinato	
	SORESI MAURIZIO	Professore Associato Univ. di PALERMO	
	CELSA CIRO	Ricercatore a tempo Univ. di PALERMO determinato	
	LAVANCO GIANLUCA	Ricercatore a tempo Univ. di PALERMO determinato	
CREDITS	9		
PROPAEDEUTICAL SUBJECTS	91705 - HUMAN PHYSIOLOGY		
MUTUALIZATION			
YEAR	2		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	BRANCATO ANNA		
		Farmacologia, primo piano Ed. 11d, Policlinico Universitari Paolo Giaccone	
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	CABIBBO GIUSEPPE		
	Monday 14:00 16:00	Sezione di Gastroenterologia, Clinica Medica I, Piazza dell Cliniche ${\rm n.2.}$	le
	CELSA CIRO		
	Wednesday 10:00 12:00		
	CORRAO SALVATORE		
	Monday 9:00 13:00		
	LAVANCO GIANLUCA		
		Policlinico P. Giaccone. Edificio 11d Farmacologia 1º piano	0
	SORESI MAURIZIO  Monday 12:30 14:00	Di.Bi.M.I.S via del Vespro 141	
	WIUTIUAY 12.30 14.00	אוועויםיום אוע מפון אפארואיויםיום אוע פיייואיייםיים	

**DOCENTE:** Prof. MAURIZIO SORESI- Sede NIGHTINGALE

<b>DOCENTE:</b> Prof. MAURIZIO SORESI- Sede	
PREREQUISITES	Attendance of the course of human anatomy and physiology
LEARNING OUTCOMES	Knowledge and ability of comprehension Acquisition of basic concepts of internal medicine, gastroenterology and pharmacology.
	Ability to apply knowledge and comprehension Ability to build pathways of analysis between human pathologies and pharmacological approaches. Autonomy of judgment Knowledge of the theoretical and practical connections between the mechanisms of disease and the clinical manifestations of diseases and the pharmacological therapies.
	Ability of communication Synthesis and exposure skills related to the main topics of the course
	Ability of learning Ability to follow interdisciplinary pathways and correlation between etiology, pathogenesis and clinical presentation of acute and chronic diseases.
ASSESSMENT METHODS	The oral examination whose purpose is to verify due competences and the ability of personal synthesis concerning the program. The assessment is given in numbers (from 18 to 30). Students will have to answer orally at least three questions concerning the program and the texts suggested during lectures. Questions asked verify: a) acquired competences; b) ability of elaboration; c) the acquisition of adequate abilities of presentation; d) personal autonomy of judgment. Distribution of marks.
	30 – 30 cum laude: a) advanced knowledge concerning suggested topics and deep comprehension of the principles relative to the subjects studied b) advanced ability of application of acquired knowledge and full mastery of the most effective instruments to conceive a cultural analysis based on particular theoretical orientations c) correct use of the specific subjects relative to the discipline d) excellent ability to organize, in an autonomous and innovative way, topics relative to the discipline
	26 – 29: a) exhaustive and complete knowledge associated to a critical awareness b) good ability of application concerning acquired knowledge and good level of competence concerning the most effective instruments suited to make a cultural analysis on the basis of some theoretical orientations c) good competence of the specific orientations and disciplinary languages d) ability of organization due topics in an autonomous and innovative way
	22 – 25: a) knowledge of facts, principles and general concepts concerning the program b) more than basic ability of application concerning methods and instruments relative to the studied subjects c) more than basic competence of the specific orientations and disciplinary languages d) more than basic ability of organization relative to due topics
	18-21: a) sufficient knowledge of the main topics concerning the program to study b) sufficient capacity of application of the studied subjects c) sufficient competence of the general orientations and disciplinary languages d) sufficient ability of organization relative to due topics
TEACHING METHODS	Frontal lectures and interactive discussion with the students

## DOCENTE: Prof. SALVATORE CORRAO- Sede GORDON

PREREQUISITES	Basic knowledge of anatomy, physiology, biology, genetics, biochemistry
LEARNING OUTCOMES	Knowledge and understanding Acquisition of tools for understanding the etiopathogenetic and pathophysiological mechanisms of diseases. Ability to use the specific language of these disciplines. Knowledge of the general characteristics of the main medical and surgical diseases. Students must demonstrate that they have achieved the following objectives: Ability to apply knowledge and understanding Ability to recognize and apply the cognitive tools and the methodological rigor of medicine for the scientific and rational exercise of the profession. Demonstrate the ability to apply their knowledge and understanding to the main internal and surgical diseases. Autonomy of judgment Being able to independently evaluate the results of studies aimed at clarifying the etiopathogenetic and pathophysiological mechanisms of diseases. To acquire sufficient knowledge of the world of patients to interpret laboratory data. Communication skills Ability to explain the acquired knowledge in a simple, immediate and exhaustive way as well as to know how to interface with colleagues, health personnel, individual patients and family members. Learning skills Ability to update by consulting the scientific publications of the disciplines in question. Ability to participate, using the knowledge acquired during the course, in continuous updating initiatives in the professional field
ASSESSMENT METHODS	Oral exam. The student will have to answer at least four oral questions, at least two for each module on different parts of the program, with reference to the recommended texts. The final test is aimed at assessing whether the student has knowledge and understanding of the topics, has acquired interpretation skills and independent judgment. Evaluation and criteria: the evaluation is out of thirty as reported: http://www.unipa.it/scuole/dimedicinaechirurgia
TEACHING METHODS	frontal lessons

## MODULE DIGESTIVE SYSTEM DISEASES AND NUTRITION PATHOLOGIES

Prof. CIRO CELSA - Sede GORDON, - Sede GORDON

#### SUGGESTED BIBLIOGRAPHY

Sleisenger e Fordtran. Malattie gastrointestinali ed epatiche. Fisiopatologia, diagnosi e trattamento, 2018, Edra Editore (ISBN 978-8821444043)

Massini et al., Medicina Interna (VI ed.), 2019, McGraw-Hill Education (ISBN 978-8838694660)

Claudio Rugarli; Medicina Interna sistematica, Editrice Masson

Ricerche bibliografiche consigliate dal Docente

Appunti e materiale di lezione

AMBIT	10727-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

#### **EDUCATIONAL OBJECTIVES OF THE MODULE**

#### Versione inglese

The course aims to provide students with:

- knowledge of the main gastroenterological diseases,
- the correlation between nutrition, food behaviors and gastroenterological diseases;
- knowledge to establish a good relationship with patients suffering from gastroenterological diseases;
- the ability to interact with other professional figures (physicians, nurses, pharmacists) participating in the management of patient health.

The student must acquire knowledge about:

- etiopathogenetic mechanisms that determine acute and chronic digestive diseases and their natural history;
- interpretation of the patient's symptoms and the ability to discuss with other health figures;
- diagnostic processes and therapies of major gastrointestinal diseases.
- Relationship with the patient in order to evaluate the difficulties of eating in chronic gastrointestinal diseases, and to be able to recommend correct and useful food regimens for acute and chronic diseases.
- planning and management of parenteral and / or enteral diet for patients with digestive disorders with severe clinical onset or end stage diseases

Hrs	Frontal teaching
4	Basic mechanismis of normal and abnormal gastrointestinal function: motility, secrection and absorbiption, nutrition.
2	Evidence based approach to common gastrointestinal problems
2	The functional and inflammatory diseases of the esophagus, stomach and duodenum (Gastroesophageal reflux, acute and chronic gastritis, acute duodenitis).
2	Celiac disease (intestinal and extra-intestinal symptoms and signs, non-invasive diagnosis)
2	The inflammatory bowel disease: symptoms, diagnosis and complications.
2	Intestinal Tumors
2	Celiac disease: indications for the diet and its complications
2	Irritable bowel syndrome
2	General criteria of therapy of digestive and liver diseases
2	Nutritional bases and dietary programs to prevent and cure gastroenterological diseases
2	The pathophysiological bases of artificial nutrition and the main indications in gastrointestinal diseases
2	Indication and management of parenteral nutrition in gastroenterological diseases
2	Indication and management of enteral nutrition in adult and child
2	Case reports and discussion

## MODULE PHARMACOLOGY

Prof. GIANLUCA LAVANCO - Sede NIGHTINGALE, - Sede NIGHTINGALE

#### SUGGESTED BIBLIOGRAPHY

Karen Whalen, Le basi della farmacologia - Zanichelli (terza edizione; 2020) ISBN: 9788808320292

The Manual of the Pharmacological Basis of THERAPEUTICS. Goodman & Gilman's. XIII Ed. 2018 Mc Graw-Hill Education ISBN 978-125958473244364

AMBIT	10305-Primo soccorso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

## **EDUCATIONAL OBJECTIVES OF THE MODULE**

The learning objectives of the module include familiarity with the concepts and vocabulary of the discipline; knowledge of the experimental and clinical fields in which pharmacology intervenes, awareness of the interactions between drugs and the organism, and the acquisition of the principles for the appropriate use of the drug, with particular reference to commonly employed drugs. Particular training objectives concern the awareness of the active role of the healthcare professional in monitoring the efficacy and safety of the therapy, the promotion of therapeutic adherence, and evidence-based information.

Hrs	Frontal teaching
3	Introduction, drug development. Routes of drug administration, assorbimento, distribution, metabolismo and elimination of drugs. Plasma drug concentration and pharmacokinetic parameters. Drug-drug interactions.
3	Pharmacodynamics. Drug-receptor interactions and quantitative drug response. Receptors and modulation of receptor responses. Mechanisms of tolerance and drug dependence. Drug targets. ADR, pharmacovigilance
2	Drugs that affect the autonomic nervous system.
7	Drugs affecting the central nervous system. Anxiolytics, sedative-hypnotics; anesthetics, analgesics; antipsychotics, drugs of abuse; drugs active in neurodegenerative diseases.
8	Drugs that affect the cardiovascular system: antihypertensive drugs; antianginals; antiarrhythmics; drugs employed in heart failure; anticoagulants and antiplatelet agents.  Antidyslipidemic drugs. Antidiabetic agents.
4	Drugs employed for acute, chronic and allergic-based inflammatory diseases: non-steroidal anti-inflammatory drugs, corticosteroids; antihistamines; biologics.
1	Drugs acting on the digestive tract: prokinetic agents, antidiarrheal agents, spasmolytic drugs, antiemetics.
2	Principles of antibiotic therapy, PK/PD coupling, main antibiotics classes.

## MODULE DIGESTIVE SYSTEM DISEASES AND NUTRITION PATHOLOGIES

Prof. GIUSEPPE CABIBBO - Sede NIGHTINGALE, - Sede NIGHTINGALE

#### SUGGESTED BIBLIOGRAPHY

Malattie dell'Apparato Digerente - Unigastro Edizione 2019-2022. Editrice Gastroenterologica Italiana. ISBN 978-88-214-5046-4

Ricerche bibliografiche consigliate dal Docente

Appunti e materiale di lezione

AMBIT	10727-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

#### **EDUCATIONAL OBJECTIVES OF THE MODULE**

The course aims to provide students with:

- knowledge of the main gastroenterological diseases,
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- interpretation of the patient's symptoms and the ability to discuss with other health figures;
- diagnostic processes and therapies of major gastrointestinal diseases.
- Relationship with the patient in order to evaluate the difficulties of eating in chronic gastrointestinal diseases, and to be able to recommend correct and useful food regimens for acute and chronic diseases.
- planning and management of parenteral and / or enteral diet for patients with digestive disorders with severe clinical onset or end stage diseases

Hrs	Frontal teaching
2	Esophageal disease; Reflux and achalasia
2	Peptic ulcer disease and Helicobacter Pylori
3	Celiac disease and malabsorption
3	Inflammatory bowel diseases; Crohn's disease; Ulcerative colitis
3	Neoplasms of the esophagus, stomach and colon
3	Acute and chronic viral hepatitis
2	Steatosis, steatohepatitis, alcohol related disease
4	Liver cirrhosis and hepatocellular carcinoma
3	Clinical approach to jaundice, cholestasis and biliary obstructive disorders
3	Acute and chronic pancreatitis
2	Indications for enteral and parenteral nutrition, and for re-start to oral nutrition

## MODULE INTERNAL MEDICINE

Prof. MAURIZIO SORESI - Sede NIGHTINGALE, - Sede NIGHTINGALE

#### SUGGESTED BIBLIOGRAPHY

Incalzi RA. Medicina Interna per Scienze Infermieristiche (II Ed). dicembre 2021 Piccin (ISBN: 978-88-299-3039-5) Massini et al., Medicina Interna (VI ed.), 2019, McGraw-Hill Education (ISBN 978-8838694660) Claudio Rugarli; Medicina Interna sistematica, Editrice Masson (Ed 8). 2021. ISBN 9788821450952

AMBIT	10313-Interdisciplinari e cliniche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

#### **EDUCATIONAL OBJECTIVES OF THE MODULE**

Knowledge and understanding: The aim of the module is the student's knowledge of taxonomy, epidemiology, etiopathogenesis, natural history, differential diagnosis, clinical phenomenology and therapeutic management of the most frequent acute and chronic pathologies of IInternal Medicine.

The Student must acquire the clinical diagnostic and prognostic significance of some laboratory and instrumental investigations of specific performance in the management of some clinical internistic entities (EGA, Spirometry, diagnostic and therapeutic paracentesis, thoracentesis, coagulation tests, radiological diagnostics, etc.).

Ability to apply knowledge and understanding: the Student, at the end of the course, thanks to the above acquisitions, will have to be able to correctly apply the information for a correct differential diagnosis between diseases with common signs and symptoms, to indicate to reach diagnosis a conscious choice of the various diagnostic methods and to apply the right therapeutic choices for a correct management of the patient.

Ability to apply knowledge and understanding: the Student, at the end of the course, thanks to the above acquisitions, must' be able to properly apply the information for a diagnosis of the major properly complications in Internal Medicine and their management. The verification will be carried out with a final oral exam.

Hrs	Frontal teaching
4	Respiratoryaooaratus -dyspnoea and cyanosis: pathophysiology and clinical - acute and chronic, partial and global respiratory failure -pneumonia, bronchial asthma, chronic bronchitis and its sequelae;
4	Cardiovascular apparatus pathophysiology of the heart; primary and secondary arterial hypertension; heart failure; pulmonary embolism
4	Endocrine-metabolic apparatus -diabetes mellitus and its complications, thyroid diseases, surrenal diseases -obesity and its complications, the metabolic syndrome
4	Nephrology -Glomerulo-nephritis, Acute and chronic renal failure, Urinary tract infections
2	Electrolyte disorders. disorders of Acid-Base Balance
4	Hematology - Anemias, leukemias and lymphomas, notes on coagulation disorders
2	Autoimmune pathology Autoimmune concepts; LES, rheumatoid arthritis
4	Fever of unknown origin (FUO). Low-grade fever. Infectious diseases: Brucellosis, Salmonellosis, Rickettiosis, Mononucleosis, leishmaniasis,
2	Various - Drug induced reactions, excessive and incorrect use of drugs.

## MODULE INTERNAL MEDICINE

Prof. SALVATORE CORRAO - Sede GORDON, - Sede GORDON

#### SUGGESTED BIBLIOGRAPHY

Infermieristica clinica in medicina interna Hoepli di Pier Maria Battezzati 2009 Ricerche bibliografiche consigliate dal Docente Appunti e materiale di lezione

AMBIT	10313-Interdisciplinari e cliniche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

## **EDUCATIONAL OBJECTIVES OF THE MODULE**

Knowledge and understanding: taxonomy, epidemiology, etiopathogenesis, pathophysiology, and clinic of diseases of internal interest with particular reference to chronic non-communicable diseases and the main conditions of hospitalization in ordinary hospitalization.

Ability to apply knowledge: the student will develop the knowledge to translate what has been acquired during the course into clinical nursing practice.

Learning skills: during the course the tools for continuing education in medicine will be provided with particular reference to

Independent judgment: the course will develop clinical skills to support medical action and identify the best nursing interventions.

Hrs	Frontal teaching
4	The complex patient of internal medicine, multidimensional evaluation and implication in nursing practice Elements of physical semeiotics part one (face, mouth, eye, ear, neck, chest, abdomen, hands, nails, legs)
4	Elements of physical semeiotics part two (face, mouth, eye, ear, neck, chest, abdomen, hands, nails, legs)
4	Epidemiological, clinical and pathophysiological framework of respiratory and cardiovascular diseases and implications in nursing practice
4	Epidemiological, clinical and pathophysiological framework of endocrine-metabolic pathologies and implications in nursing practice
4	Epidemiological, clinical and pathophysiological framework of haematological diseases and implications in nursing practice
4	Epidemiological, clinical and pathophysiological framework of nephrological diseases and implications in nursing practice
4	Epidemiological, clinical and pathophysiological framework of rheumatic diseases and implications in nursing practice
2	Sepsis and antibiotic therapy

## MODULE PHARMACOLOGY

Prof.ssa ANNA BRANCATO - Sede GORDON, - Sede GORDON

#### SUGGESTED BIBLIOGRAPHY

Karen Whalen, Le basi della farmacologia - Zanichelli (terza edizione; 2020) ISBN: 9788808320292

Taglialatela, Conforti, Farmacologia per le lauree triennali e magistrali. III Edizione Idelson-Gnocchi ISBN: 9788879477383.

AMBIT	10305-Primo soccorso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

## **EDUCATIONAL OBJECTIVES OF THE MODULE**

The learning objectives of the module include familiarity with the concepts and vocabulary of the discipline; knowledge of the experimental and clinical fields in which pharmacology intervenes, awareness of the interactions between drugs and the organism, and the acquisition of the principles for the appropriate use of the drug, with particular reference to commonly employed drugs. Particular training objectives concern the awareness of the active role of the healthcare professional in monitoring the efficacy and safety of the therapy, the promotion of therapeutic adherence, and evidence-based information.

Hrs	Frontal teaching	
3	Introduction, drug development. Routes of drug administration, assorbimento, distribution, metabolismo and elimination of drugs. Plasma drug concentration and pharmacokinetic parameters. Drug-drug interactions.	
3	Pharmacodynamics. Drug-receptor interactions and quantitative drug response. Receptors and modulation of receptor responses. Mechanisms of tolerance and drug dependence. Drug targets. ADR, pharmacovigilance	
2	Drugs that affect the autonomic nervous system.	
7	Drugs affecting the central nervous system. Anxiolytics, sedative-hypnotics; anesthetics, analgesics; antipsychotics, drugs of abuse; drugs active in neurodegenerative diseases.	
8	Drugs that affect the cardiovascular system: antihypertensive drugs; antianginals; antiarrhythmics; drugs employed in heart failure; anticoagulants and antiplatelet agents.  Antidyslipidemic drugs. Antidiabetic agents.	
4	Drugs employed for acute, chronic and allergic-based inflammatory diseases: non-steroidal anti-inflammatory drugs, corticosteroids; antihistamines; biologics.	
1	Drugs acting on the digestive tract: prokinetic agents, antidiarrheal agents, spasmolytic drugs, antiemetics.	
2	Principles of antibiotic therapy, PK/PD coupling, main antibiotics classes.	