



# 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	INTERNAL MEDICINE, GASTROENTEROLOGY AND PHARMACOLOGY - INTEGRATED COURSE
CODE	21846
MODULES	Yes
NUMBER OF MODULES	3
SCIENTIFIC SECTOR(S)	MED/09, BIO/14, MED/12
HEAD PROFESSOR(S)	CALVARUSO VINCENZA Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	GIAMMANCO ANTONINA Ricercatore a tempo determinato Univ. di PALERMO
	CALVARUSO VINCENZA Professore Associato Univ. di PALERMO
CREDITS	9
PROPAEDEUTICAL SUBJECTS	91705 - HUMAN PHYSIOLOGY
MUTUALIZATION	
YEAR	2
TERM (SEMESTER)	1° semester
ATTENDANCE	Mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	<p><b>CALVARUSO VINCENZA</b> Monday 14:00 16:00 Sezione di Gastroenterologia, Clinica Medica I, Piazza delle Cliniche n.2.</p> <p><b>GIAMMANCO ANTONINA</b> Tuesday 11:00 12:00</p>

**DOCENTE:** Prof.ssa VINCENZA CALVARUSO

<b>PREREQUISITES</b>	Attendance of the course of human anatomy and physiology
<b>LEARNING OUTCOMES</b>	<p>Knowledge and ability of comprehension Acquisition of basic concepts of internal medicine, gastroenterology and pharmacology.</p> <p>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.</p> <p>Ability of communication Synthesis and exposure skills related to the main topics of the course</p> <p>Ability of learning Ability to follow interdisciplinary pathways and correlation between etiology, pathogenesis and clinical presentation of acute and chronic diseases.</p>
<b>ASSESSMENT METHODS</b>	<p>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.</p> <p>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</p> <p>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</p> <p>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</p> <p>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</p>
<b>TEACHING METHODS</b>	Frontal lectures and interactive discussion with the students

## MODULE PHARMACOLOGY

### SUGGESTED BIBLIOGRAPHY

Karen Whalen, Le basi della farmacologia - Zanichelli (terza edizione; 2020) ISBN: 9788808320292  
 Tagliatela, Conforti, Farmacologia per le lauree triennali e magistrali. III Edizione Idelson-Gnocchi ISBN: 9788879477383.

<b>AMBIT</b>	10305-Primo soccorso
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<b>INDIVIDUAL STUDY (Hrs)</b>	45
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<b>COURSE ACTIVITY (Hrs)</b>	30
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### 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.

## SYLLABUS

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 INTERNAL MEDICINE

*Prof.ssa ANTONINA GIAMMANCO*

### SUGGESTED BIBLIOGRAPHY

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

<b>AMBIT</b>	10313-Interdisciplinari e cliniche
<b>INDIVIDUAL STUDY (Hrs)</b>	45
<b>COURSE ACTIVITY (Hrs)</b>	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 Internal 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.

## SYLLABUS

Hrs	Frontal teaching
4	Respiratory apparatus -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
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**  
**DIGESTIVE SYSTEM DISEASES AND NUTRITION PATHOLOGIES**

*Prof.ssa VINCENZA CALVARUSO*

**SUGGESTED BIBLIOGRAPHY**

Malattie dell'Apparato Digerente. Unigastro. ISBN 978-88-214-5046-4  
Ricerche bibliografiche consigliate dal Docente  
Appunti e materiale di lezione

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

**EDUCATIONAL OBJECTIVES OF THE MODULE**

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  
Understand the nursing approach to gastroenterological and liver problems, including those of the elderly patient

**SYLLABUS**

<b>Hrs</b>	<b>Frontal teaching</b>
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 return to oral feeding.