



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)	DIETISTICS		
INTEGRATED COURSE	MICROBIOLOGY AND GENERAL PATHOLOGY - INTEGRATED COURSE		
CODE	05209		
MODULES	Yes		
NUMBER OF MODULES	3		
SCIENTIFIC SECTOR(S)	MED/04, MED/07, MED/12		
HEAD PROFESSOR(S)	DI MARCO VITO	Professore Ordinario	Univ. di PALERMO
OTHER PROFESSOR(S)	CAPRA GIUSEPPINA	Professore Associato	Univ. di PALERMO
	MISIANO GABRIELLA	Ricercatore	Univ. di PALERMO
	DI MARCO VITO	Professore Ordinario	Univ. di PALERMO
CREDITS	8		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	1		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>CAPRA GIUSEPPINA Tuesday 12:00 13:00 PROSAMI Via del vespro 133</p> <p>DI MARCO VITO Tuesday 13:00 14:00 Studio personale, Dipartimento Biomedico di Medicina Interna e Specialistica (Di.Bi.M.I.S.) Piazza delle Cliniche, 2 Secondo Piano</p> <p>MISIANO GABRIELLA Monday 14:00 16:00 Dipartimento di Biomedicina, Neuroscienze e Diagnostica avanzata Bi.N.D - Sezione di Patologia Generale - Corso Tukory, 211 - 90134 Palermo</p> <p>Tuesday 14:00 16:00 Dipartimento di Biomedicina, Neuroscienze e Diagnostica avanzata Bi.N.D - Sezione di Patologia Generale - Corso Tukory, 211 - 90134 Palermo</p> <p>Wednesday 14:00 16:00 Dipartimento di Biomedicina, Neuroscienze e Diagnostica avanzata Bi.N.D - Sezione di Patologia Generale - Corso Tukory, 211 - 90134 Palermo</p>		

DOCENTE: Prof. VITO DI MARCO

PREREQUISITES	Attendance of the course of human anatomy and physiology
LEARNING OUTCOMES	<p>Knowledge and ability of comprehension Acquisition of basic concepts of microbiology, general pathology and gastroenterology.</p> <p>Ability to apply knowledge and comprehension Ability to build pathways of analysis between viral and bacterial infections, acute and chronic inflammatory processes and mechanisms that determine inflammatory bowel disease.</p> <p>Autonomy of judgment Knowledge of the theoretical and practical connections between the infections, the mechanisms of disease and the clinical manifestations of gastroenterological diseases.</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>
ASSESSMENT METHODS	<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>
TEACHING METHODS	Frontal lectures and interactive discussion with the students

MODULE GASTROENTEROLOGY I

Prof. VITO DI MARCO

SUGGESTED BIBLIOGRAPHY

Manuale di Gastroenterologia UNIGASTRO ed. 2015-2017

AMBIT	10347-Scienze della dietistica
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,
- 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

SYLLABUS

Hrs	Frontal teaching
4	Basic mechanisms of normal and abnormal gastrointestinal function: motility, secretion and absorption, 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
Hrs	Practice
2	Case reports and discussion

**MODULE
GENERAL PATHOLOGY**

Prof.ssa GABRIELLA MISIANO

SUGGESTED BIBLIOGRAPHY

G.M. Pontieri, Elementi di Patologia generale e Fisiopatologia generale -2018. Ed. Piccin, IV edizione, ISBN 978-88-299-2912-2

Parola M. Patologia generale ed elementi di Fisiopatologia- Ed. Edises Università, Edizione II/2020, ISBN 9788836230136

AMBIT	10338-Scienze biomediche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

The aim of the module is to provide the necessary skills to understand the etiopathogenetic and pathological mechanisms of diseases and the morphological and functional alterations of tissues and organs. The main objective is understanding the causes of both genetic and environmental diseases, host defense and repair following an inflammatory stimulus, immunopathogenic reactions, i.e. mechanisms leading immune system to react against self determining a disease state, the basic aspects of the immune response and immune response to tumors.

SYLLABUS

Hrs	Frontal teaching
2	Health and disease states, homeostasis, etiology and pathogenesis. Diseases from intrinsic and extrinsic causes
4	The acute inflammatory response: the vascular modifications. The formation of an inflammatory exudate
4	The chronic inflammatory response: causes, involved cells and mediators.
2	The healing process: regeneration and repair
2	The systemic effects of inflammatory response: acute phase reaction, leukocytosis, fever.
2	Amyloidosis: classification, etiopathogenesis and pathophysiology
2	The complete blood count in the inflammatory response
2	Anemia
4	Immune inflammation and hypersensitivity reactions
2	Tumour immunology and immunotherapy
2	Shock: definition and causes
2	Aging and age related disease

MODULE
MICROBIOLOGY AND CLINICAL MICROBIOLOGY

Prof.ssa GIUSEPPINA CAPRA

SUGGESTED BIBLIOGRAPHY

Eudes Lanciotti – Principi di Microbiologia Clinica – terza edizione – Casa Editrice Ambrosiana
La Placa, Principi di Microbiologia Medica, Societa' Editrice Esculapio
Favalli, Landolfo, Brunello, Sherris Microbiologia Medica, EMSI
Murray P.R., Rosenthal K.S., Kobayashi G.S. (2005), Microbiologia, EdiSES.

AMBIT	10338-Scienze biomediche
INDIVIDUAL STUDY (Hrs)	30
COURSE ACTIVITY (Hrs)	20

EDUCATIONAL OBJECTIVES OF THE MODULE

- To know structural-functional, replicative and pathogenic characteristics of microorganism.
- To know the interactions between microorganism and host.
- To know the mechanisms of control of microbial infections.
- To know the basic laboratory methodology for the diagnosis of infections
- Be able to correlate the microbiological knowledge with dietary assistance.

SYLLABUS

Hrs	Frontal teaching
2	Structure and replication of bacteria
1	Structure and replication of fungi;
2	Mechanisms of action of bacteria toxins and pathogenicity factors of bacteria and fungi.
3	Structure and replication of viruses; virus-cell and virus-host interactions
2	Antimicrobial agents and vaccines: Prevention
2	Principle of microbiological diagnosis
8	Principals pathogens causing respiratory, gastroenteric and urogenital diseases (Streptococcus spp; Staphylococcus spp; Neisseria spp; Micobacterium spp; Clostridium spp; Enterobacterium spp; H. pylori, Herpesvirus; Papillomavirus; hepatitis viruses; Retroviruses; Candida). The role of the intestinal microbiota