



# UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche		
ACADEMIC YEAR	2023/2024		
MASTER'S DEGREE (MSC)	HUMAN FEEDING AND NUTRITION SCIENCES		
INTEGRATED COURSE	MORPHO-FUNCTIONAL BASES AND PATHOLOGY OF THE GASTRO-INTESTINAL SYSTEM - INTEGRATED COURSE		
CODE	23423		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	BIO/09, MED/04		
HEAD PROFESSOR(S)	VASTO SONYA	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)	VASTO SONYA	Professore Associato	Univ. di PALERMO
	TERZO SIMONA	Ricercatore a tempo determinato	Univ. di PALERMO
CREDITS	6		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	1		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p><b>TERZO SIMONA</b></p> <p>Friday 10:00 12:00 Studio personale presso Dipartimento STEBICEF, Edificio 16 -II piano- viale delle Scienze. E' preferibile concordare appuntamento per e-mail: <a href="mailto:simona.terzo01@unipa.it">simona.terzo01@unipa.it</a></p> <p><b>VASTO SONYA</b></p> <p>Monday 10:00 11:30 Dipartimento Stebicef, parco d'Orleans, Edificio 16, piano primo</p> <p>Wednesday 10:00 11:30 Dipartimento Stebicef, parco d'Orleans, Edificio 16, piano primo</p>		

**DOCENTE:** Prof.ssa SONYA VASTO

<b>PREREQUISITES</b>	The ultimate goal of the integrated course is to achieve knowledge and understanding in the field of pathophysiology and medical therapy. Essential prerequisite to have basic knowledge related to the courses of Pathophysiology, Anatomy and Human, Biology and Genetics, Immunology, Microbiology and Virology inherent to the educational objectives of the course
<b>LEARNING OUTCOMES</b>	The student will: - acquire knowledge and understanding skills in relation to metabolic pathology and morphology and functionality of the gastrointestinal tract. - show ability to apply knowledge and understanding of the pathologies in question, with adequate communication skills
<b>ASSESSMENT METHODS</b>	Learners at the end of the C.I. will have to demonstrate their ability to apply their knowledge and understanding for a professional approach to clinical problems of gastroenterological interest and metabolic syndrome. Test Tipology: Oral Test. The test aims at assessing whether the student possesses knowledge and understanding of the subjects of the integrated teaching / course program, autonomy of judgment, ability to apply acquired knowledge, specific disciplinary language. Minimum number of questions: The student will have to answer a minimum of three oral questions, which will cover all the topics of the integrated course / course, with reference to the suggested texts. Valuation and Policies: The evaluation is in thirty-five, as shown in the diagram below. Excellent 30- 30 and praise excellent knowledge of subjects, excellent language skills, good analytic ability, the student is able to apply knowledge to solve the problems proposed; very good 26-29 - Good command of subjects, full language skills, the student is able to apply knowledge to solve the proposed problems. Good 24-25 - Basic Knowledge of Key Arguments, Discrete Language Properties, with limited ability to apply knowledge to the problem solving themselves. Satisfactory 21-23 - He does not fully master the main subjects of the teaching but possesses knowledge, satisfying language skills, poor ability to apply the acquired knowledge independently. Enough 18-20 - Minimum basic knowledge of the main topics of teaching and technical language, little or no ability to apply the acquired knowledge. Insufficient She does not have an acceptable knowledge of the contents of the topics taught in
<b>TEACHING METHODS</b>	Frontal teaching

**MODULE**  
**GASTRO-INTESTINAL SYSTEM PHYSIOLOGY**

*Prof.ssa SIMONA TERZO*

**SUGGESTED BIBLIOGRAPHY**

Alimentazione, nutrizione e salute Debellis, Poli EdiSES  
Materiale dato a lezione

<b>AMBIT</b>	20989-Attivit Formative Affini o Integrative
<b>INDIVIDUAL STUDY (Hrs)</b>	51
<b>COURSE ACTIVITY (Hrs)</b>	24

**EDUCATIONAL OBJECTIVES OF THE MODULE**

To provide basic knowledge on the digestive tract functions and relative control mechanisms. Attention will be focused on the role of each component (Mouth, oesophagus, stomach, small and large intestine, liver and pancreas) and on chemical digestion and absorption of nutritional substances.

**SYLLABUS**

Hrs	Frontal teaching
8	Overview of digestive anatomy and physiology. Neural, endocrine and paracrine regulation of digestive functions. The motor function: propulsive and non-propulsive motility – Gastric emptying – Migrating complex and mass movements.
6	Salivary secretion. Gastric secretion. Pancreatic secretion - Hepatic secretion
8	Digestion and absorption of carbohydrates - Digestion and absorption of proteins - Digestion and absorption of lipids. Water and electrolyte. Vitamin, calcium and iron absorption
2	Gustative physiology

**MODULE**  
**GASTROINTESTINAL SYSTEM PATHOLOGY**

*Prof.ssa SONYA VASTO*

**SUGGESTED BIBLIOGRAPHY**

F. Celotti Patologia Generale e Fisiopatologia. ed EDISES  
Robbins e Cotran: Le basi patologiche delle Malattie ed. Elsevier

<b>AMBIT</b>	20989-Attivit Formative Affini o Integrative
<b>INDIVIDUAL STUDY (Hrs)</b>	51
<b>COURSE ACTIVITY (Hrs)</b>	24

**EDUCATIONAL OBJECTIVES OF THE MODULE**

Acquisition of the skills necessary to understand the etiopathogenetic mechanisms of gastrointestinal diseases and alterations of structures, functions and control mechanisms at various levels of integration.

**SYLLABUS**

Hrs	Frontal teaching
4	Bases of innate and acquired immune response: antigenic recognition and lymphocyte activation, major histocompatibility complex
4	Hypersensitivity reactions. Regional immunity and specialized immune responses in epithelial and immunologically privileged tissues and inflammation. Immunological tolerance and autoimmune diseases (Chron disease, celiac disease)
2	Gastrointestinal tract diseases (oral cavity, esophagus, stomach, small and large intestine, appendix and anus) hernia, diverticula, scleroderma, reflux disease (GERD)
4	Ulcers, gastritis, inflammatory bowel disease (IBD). The role of calprotectin
2	Food allergies and intolerances
2	Clinical pathology of gastro intestinal disease, Blood markers, plasma proteins, urinary marker
2	Food factors with protective action
4	Carcinogenesis and oncogenic food risk.K-colon