



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche		
<b>ACADEMIC YEAR</b>	2022/2023		
<b>MASTER'S DEGREE (MSC)</b>	HUMAN FEEDING AND NUTRITION SCIENCES		
<b>INTEGRATED COURSE</b>	PHARMACOLOGY, TOXICOLOGY AND FOOD REGULATIONS		
<b>CODE</b>	21007		
<b>MODULES</b>	Yes		
<b>NUMBER OF MODULES</b>	2		
<b>SCIENTIFIC SECTOR(S)</b>	BIO/14, CHIM/09		
<b>HEAD PROFESSOR(S)</b>	NOTARBARTOLO DI VILLAROSA MONICA	Professore Associato	Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	NOTARBARTOLO DI VILLAROSA MONICA	Professore Associato	Univ. di PALERMO
	SCIALABBA CINZIA	Ricercatore a tempo determinato	Univ. di PALERMO
<b>CREDITS</b>	9		
<b>PROPAEDEUTICAL SUBJECTS</b>			
<b>MUTUALIZATION</b>			
<b>YEAR</b>	1		
<b>TERM (SEMESTER)</b>	2° semester		
<b>ATTENDANCE</b>	Mandatory		
<b>EVALUATION</b>	Out of 30		
<b>TEACHER OFFICE HOURS</b>	<p><b>NOTARBARTOLO DI VILLAROSA MONICA</b>  Monday 11:30 12:30 Studio Notarbartolo Dipartimento Stebicef Edificio 16 piano terra</p> <p><b>SCIALABBA CINZIA</b>  Tuesday 11:00 13:00 Via Archirafi 30. Terzo Piano</p>		

**DOCENTE:** Prof.ssa MONICA NOTARBARTOLO DI VILLAROSA

<b>PREREQUISITES</b>	Basic knowledge of physiology, anatomy and biochemistry and general and organic chemistry.
<b>LEARNING OUTCOMES</b>	<p>Knowledge and understanding At the end of this course, the student will acquire notions and tools useful for acquiring a solid knowledge of the concepts of general pharmacology and particular classes of drugs and legislation.</p> <p>Ability to apply knowledge and understanding At the end of this course the student will acquire the knowledge concerning the main mechanisms of action of the most relevant pharmacological classes and of the relationship with nutrition.</p> <p>Judgment autonomy At the end of this course, the student will acquire autonomy of judgment and communication skills regarding the diet / medication ratio through group activities.</p> <p>Learning ability At the end of this course, the student will be able to acquire the necessary skills to deal with the various aspects related to the interactions between drugs, nutrition and food and nutraceutical integration and their legislation.</p>
<b>ASSESSMENT METHODS</b>	<p>Rating Vote. Out 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.</p> <p>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.</p> <p>Valuation and Policies: The evaluation is in thirty-five, as shown in the diagram below.</p> <p>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.</p> <p>Good 24-25 - Basic Knowledge of Key Arguments, Discrete Language Properties, with limited ability to apply knowledge to the problem solving themselves.</p> <p>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.</p> <p>Enough 18-20 - Minimum basic knowledge of the main topics of teaching and technical language, little or no ability to apply the acquired knowledge.</p> <p>Insufficient She does not have an acceptable knowledge of the contents of the topics taught in teaching.</p>
<b>TEACHING METHODS</b>	frontal lessons

**MODULE**  
**REGULATIONS FOR HEALTH PRODUCTS AND SUPPLEMENTS**

*Prof.ssa CINZIA SCIALABBA*

**SUGGESTED BIBLIOGRAPHY**

Legislazione farmaceutiche , Paola Minghetti, Nona edizione CEA.

La chimica e gli alimenti, nutrienti e aspetti nutraceutici, Luisa Mannina, Maria Daglia e Alberto Ritieni, CEA

Normative e regolamenti europei.

<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**

The aim of the Course is the knowledge of the main law for the production and the marketing of health products and dietary supplements and their classification for the approval.

**SYLLABUS**

<b>Hrs</b>	<b>Frontal teaching</b>
24	Regulatory aspects for production and marketing of food. European food safety Agency (EFSA). Nutritional and health specification for food and nutritional label and advertising. Regulatory aspects for production and marketing of Novel Food. Regulatory aspects and marketing of food for special medical purposes. European and Regulatory aspects and marketing of food supplement. Good manufacturing practice in food supplement production. Dosages forms for supplements and their quality control. Quality and safety in food supplement. Based botanicals food supplement.

## MODULE PHARMACOLOGY AND NUTRITION

*Prof.ssa MONICA NOTARBARTOLO DI VILLAROSA*

### SUGGESTED BIBLIOGRAPHY

Materiale didattico fornito dal docente.

<b>AMBIT</b>	50516-Discipline della Nutrizione Umana
<b>INDIVIDUAL STUDY (Hrs)</b>	102
<b>COURSE ACTIVITY (Hrs)</b>	48

### EDUCATIONAL OBJECTIVES OF THE MODULE

The course aims to provide the student with knowledge concerning the mechanism of action and the side effects of drugs, drug-food interactions, with particular reference to issues related to nutrition and the use of food supplements, phytotherapy and nutraceuticals.

## SYLLABUS

Hrs	Frontal teaching
6	Introduction to the drug Pharmacokinetic principles (absorption, distribution, metabolism and excretion of drugs) Pharmacodynamic principles and variability factors in drug response
6	Phytotherapy: definition and history. Drug, active ingredient and phytocomplex. Classes of active ingredients. Herbal preparations and their formulation. Phytotherapy and adverse reactions. Interactions between phytotherapy and synthetic drugs. Plant drugs that act on: digestive system, metabolic system, liver system. Herbal drugs and states of stress.
6	Effect of nutrition on the action of drugs Modification of absorption, metabolism and elimination of drugs by the diet Influence of drugs on nutrient absorption Pharmacology of nutrients Nutraceutical principles Pharmacology of food supplements Effect of drugs on nutritional status, Nutraceuticals and drugs: similarities and differences
4	Adverse drug reactions and interactions (between drugs, between drugs and foods, between drugs and food supplements)
2	Drugs active on the gastrointestinal system
6	Cardiovascular system drugs Statins and lipid-lowering drugs Insulin and oral hypoglycaemic drugs
6	Drugs Used in Eating Behavior Disorders Drugs that modulate hunger and satiety Notes on the treatment of eating disorders
2	Drugs active on inflammation
2	Drugs active on the endocrine system
4	Medicines, food supplements and body weight Medicines, food supplements and pregnancy Medicines and food supplements in the elderly
4	Principles of antimicrobial therapy Principles of anticancer therapy