

# UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche	
ACADEMIC YEAR	2020/2021	
MASTER'S DEGREE (MSC)	HUMAN FEEDING AND NUTRITION SCIENCES	
INTEGRATED COURSE	PHARMACOLOGY, TOXICOLOGY AND FOOD REGULATIONS	
CODE	21007	
MODULES	Yes	
NUMBER OF MODULES	2	
SCIENTIFIC SECTOR(S)	BIO/14, CHIM/09	
HEAD PROFESSOR(S)	NOTARBARTOLO DI Professore Associato Univ. di PALERMO VILLAROSA MONICA	
OTHER PROFESSOR(S)	NOTARBARTOLO DI Professore Associato Univ. di PALERMO VILLAROSA MONICA	
	CAVALLARO GENNARA Professore Ordinario Univ. di PALERMO	
CREDITS	9	
PROPAEDEUTICAL SUBJECTS		
MUTUALIZATION		
YEAR	1	
TERM (SEMESTER)	2° semester	
ATTENDANCE	Not mandatory	
EVALUATION	Out of 30	
TEACHER OFFICE HOURS	CAVALLARO GENNARA	
	Tuesday 9:30 11:00 Via Archirafi, 32 - Scala A, 2^ piano	
	NOTARBARTOLO DI VILLAROSA MONICA	
	Monday 11:30 12:30 Studio Notarbartolo Dipartimento Stebicef Edificio 16 piano terra	

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

ASSESSMENT METHODS  ARBINOS OUTCOMES  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 an particular classes of drugs and legislation.  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.  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.  Learning ability At the end of this course, the student will be able to acquire the necessary skill to deal with the various aspects related to the interactions between drugs nutrition and food and nutraceutical integration and their legislation.  Rating Vote. Out TestTipology. Crall Test. The test and as 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 24-25- Basic Knowledge of Key Arguments, Discrete Language Properties, with limited ability to apply 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, li	<b>DOCENTE:</b> Prof.ssa MONICA NOTARBA	RTOLO DI VILLAROSA
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	TEACHING METHODS	

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

Prof.ssa GENNARA CAVALLARO

#### 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.

AMBIT	20989-Attivit Formative Affini o Integrative
INDIVIDUAL STUDY (Hrs)	51
COURSE ACTIVITY (Hrs)	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**

Hrs	Frontal teaching
24	Vegetable origin products at health activity. Regulatory aspects. Preparations and Official Phramacopea. Regulation for production and marketing. European regulations for dietary supplement and novel food. European agency for food safety. Nutritional and health specification for food and nutritional label and advertising. Good manufacturing practice in dietary supplement production. Quality and safety in dietary supplement.

## MODULE PHARMACOLOGY AND NUTRITION

Prof.ssa MONICA NOTARBARTOLO DI VILLAROSA

SUGGESTED BIBLIOGRAPHY	
Materiale didattico fornito dal docente.	
AMBIT	50516-Discipline della Nutrizione Umana
INDIVIDUAL STUDY (Hrs)	102
COURSE ACTIVITY (Hrs)	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