UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"
ACADEMIC YEAR	2019/2020
BACHELOR'S DEGREE (BSC)	DIETISTICS
INTEGRATED COURSE	MEDICAL AND DIETARY SCIENCES - INTEGRATED COURSE
CODE	18949
MODULES	Yes
NUMBER OF MODULES	3
SCIENTIFIC SECTOR(S)	MED/12, MED/49, MED/13
HEAD PROFESSOR(S)	BUSCEMI SILVIO Professore Ordinario Univ. di PALERMO
OTHER PROFESSOR(S)	PIZZOLANTI GIUSEPPE Ricercatore Univ. di PALERMO PETTA SALVATORE Professore Associato Univ. di PALERMO BUSCEMI SILVIO Professore Ordinario Univ. di PALERMO
CREDITS	9
PROPAEDEUTICAL SUBJECTS	05209 - MICROBIOLOGY AND GENERAL PATHOLOGY - INTEGRATED COURSE
MUTUALIZATION	
YEAR	2
TERM (SEMESTER)	2° semester
ATTENDANCE	Mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**BUSCEMI SILVIO** Tuesday 08:00 09:30 UOC di Endocrinologia, Malattie del Ricambio e della Nutrizione (piazza delle cliniche 2 - primo piano) - PREVIA RICHIESTA a silvio.buscemi@unipa.it **PETTA SALVATORE** Monday 15:00 16:00 Secione di Gastroenterologia e Epatologia, Di.Bi.M.I.S. **PIZZOLANTI GIUSEPPE** Monday 12:00 13:00 Dipartimento Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"

PREREQUISITES	Have passed the exam related to the courses of Biology, Biomedical Sciences CI, Chemistry and production of food IC, Microbiology and general pathology CI
LEARNING OUTCOMES	The course is designed with the intent to tackle in an organic way resorting to multidisciplinary skills the complex theme "diet-obesity-steatosis liver disease ", a condition that has been achieved in the individual components pandemic dimensions and whose treatment provides a more and more role central to the professional figure of the Dietist. Knowledge and ability to understand Acquisition of basic concepts related to: macro- and micro-nutrients, mechanisms which regulate the energy balance, of raw and after foods transformations resulting from conservation and cooking; visual evaluation of food weights and volumes, anthropometric and methodological characteristics of evaluation of nutritional status, evaluation of the nutritional status of the healthy and sick people, diseases that cause malnutrition, the state of nutrition of healthy and sick people. Ability to apply knowledge and understanding Ability to identify physical and biological needs related to nutrition and to nutrition. Ability to use the appropriate tools for the evaluation of the body composition and nutrition status (food history, anthropometry, plicometry, bio-impedancemetry, DEXA). Ability to formulate food composition tables, to compile lists of nutrient equivalents to correctly execute a dietary history, to conduct an examination complete anthropometric study aimed at assessing nutritional status. Ability to recognize the conditions of malnutrition, due to excess or defect Autonomy of judgment Being able to autonomously understand any errors of the metabolism, enzymatic alterations and biological cycles and the consequences on the state of health. To be able to to autonomously interpret the results of the clinical anthropometric investigations and instrumental, and identify risk factors. Being able to identify the equivalents of undesirable nutrients from patients and to evaluate the deviation from the norm, limited to the main anthropometric parameters. Communication skills Ability to communicate the acquired concepts in a clear and organic way. Ability to describe and comment on anthropometric data and tables foods, adapting the communication forms to the interlocutors. They have the ability to listen to the patient carefully to understand and synthesize the information relevant to all issues, understanding their contents Learning skills Ability to follow specialized courses and seminars for further study in the nutrition sector. Ability to learn the mechanisms of the main metabolic diseases in the various age groups, identify the criticisms related to diagnostics and therapy. Ability to identify any genetic alterations and to address the diagnosis. Ability to learn the mechanisms underlying the measurements anthropometric. Ability to learn the methods to classify the state nutrition of individuals.
ASSESSMENT METHODS	Oral exam aimed at ascertaining the skills required by the course and the ability to personal summary. The evaluation is formulated in thirtieths. The student must answer at least two / three questions, orally, about the program, on the base of recommended texts. The questions verify a) the acquired knowledge; b) the processing capacity; c) possession of adequate exhibition capacity; d) the autonomy of personal judgment. Voting distribution. 30 - 30 cum laude: a) advanced knowledge of the topics and understanding depth of the theories and principles of the discipline b) advanced capacity of apply the acquired knowledge and full mastery of the most effective to conceive of cultural analysis on the basis of theoretical guidelines details c) properties of the specific languages of the discipline d) excellent ability to autonomously and innovatively organize the topics of study of the discipline. 26 - 29: a) comprehensive and specialized knowledge accompanied by critical awareness b) good ability to apply the acquired knowledge and a good command of the most suitable tools for carrying out a cultural analysis on the basis of some theoretical orientations c) good property of language specialist d) ability to organize autonomously and innovatively expected topics 22 - 25: a) knowledge of facts, principles, and general concepts of teaching b) basic skills to apply teaching methods and tools c) basic mastery of specialized language d) basic skills of organize the topics of study of the discipline.

	18 - 21: a) Minimum knowledge of the main topics of teaching b) Minimum ability to independently apply the acquired knowledge c) Minimum mastery of the technical language d) Minimum capacity
TEACHING METHODS	Frontal lessons. Classroom exercises

MODULE
ENDOCRINOLOGY

Prof. GIUSEPPE PIZZOLANTI

SUGGESTED BIBLIOGRAPHY	
Lombardo-Lenzi. Manuale di Endocrinologia. EdiSes Slides fornite dal docente	
AMBIT	10347-Scienze della dietistica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
EDUCATIONAL OBJECTIVES OF THE MODULE	

Knowledge and understanding
Acquire the skills to understand the pathophysiology, biochemistry, and molecular biology of the main endocrine disorders. Understanding the technical language used.

Applying knowledge and understanding
Apply the acquired knowledge to analyze and interpret endocrine problems that patients can present. Apply the principles of evidence-based medicine in the pursuit of dietician activity

Making judgments
Know how to identify and solve patient problems using acquired knowledge and be able to formulate personal judgments to solve patient-endocrine-dietetic issues.

Communication skills
Explain to the patients in a correct manner, with particular emphasis on prevention, the need for nutritional intervention in some
specific pathologies, Interact with other professional figures involved in patient care through efficient networking.

Learning ability
Ability to collect, organize and interpret correctly the informations acquired from different available resources. In particular, to integrate the information through the consultation of scientific publications in the sector, mainly through the use of computer tools (Medline, Internet).

SYLLABUS

Hrs	Frontal teaching
4	Introduction to the study of endocrinology. Historical background, concept of endocrine glands, hormones, feedback
4	Molecular action of hormones, cellular receptors, concept of second messenger, hormonal axes, Psiconeuroendocrinoimmunology
4	Diabetes mellitus: definition and classification. Physiology and pathophysiology of pancreatic insula. Molecular biology and immunopathology of DM. Clinical and therapy notes. Dietotherapy of diabetes mellitus
3	Adipose tissue, citokinic network, low-grade inflammation
3	Metabolic syndrome, definitions, physiophatology, medical therapy, dietotherapy
4	Thyroid: anatomy, physiology and pathophysiology. Goitre, hyperthyroidism, hypothyroidism, Hashimoto's disease, Graves' disease. The laboratory in the diagnosis of thyroid diseases, Metabolism and thyroid, Thyroid and weight.
2	Adrenal gland: anatomy, physiology, pathophysiology, main diseases. Adrenal's diseases and metabolism. Adrenal's diseases and weight
3	Endocrine obesity
3	Hereditary metabolic diseases

MODULE **GASTROENTEROLOGY II**
Prof. SALVATORE PETTA

SUGGESTED BIBLIOGRAPHY	
MANUALE DI GASTROENTEROLOGIA, UNIGASTRO	
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 diseases of liver, pancreas and biliary tree;
-the correlation between nutrition, food behaviors and diseases of liver, pancreas and biliary tree;
-knowledge to establish a good relationship with patients suffering from diseases of liver, pancreas and biliary tree;
-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 diseases of liver, pancreas and biliary tree 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 diseases of liver, pancreas and biliary tree.
- Relationship with the patient in order to evaluate the difficulties of eating in diseases of liver, pancreas and biliary tree, 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 ddiseases of liver, pancreas and biliary tree

SYLLABUS

Hrs	Frontal teaching
2	Pathophisiologic mechanisms of liver function, biliary tree and pancreas
2	Hypertransaminasemia and acute and chronic viral hepatitis
4	Alcoholic and autoimmune liver diseases, and drug-related liver diseases: diagnosis, therapy and nutritional implications
4	Nonalcoholic Steatohepatitis
4	Liver Cirrhosis: epidemiology, natural history and impact of nutrition as risk factor and therapy
2	Liver and biliary tree neoplasms: diagnosis, therapy and impact of nutrition
2	Sarcopenia and chronic liver disease
2	Nutrition, physical activity and nutraceutic in chronic liver diseases
4	Biliary tree diseases. Acute and chronic pancreatitis and pancreatic cancer

Hrs	Practice
4	Case reports and dicussion

MODULE
APPLIED DIETETIC TECHNICAL SCIENCES 1

Prof. SILVIO BUSCEMI

SUGGESTED BIBLIOGRAPHY	
materiale didattico fornito dal docente G. Liguri. Nutrizione e Dietologia. Aspetti clinici dell'alimentazione. Zanichelli ME Barasi. Human nutrition. A health perspective. Hodder Arnold I.A. Macdonald & Helen M. Roche. Nutrition & Metabolism. Blackwell Publishing	
AMBIT	10347-Scienze della dietistica
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
EDUCATIONAL OBJECTIVES OF THE MODULE	
The aim of this course is to provide the basics for understanding nutritional issues both in diagnostic and therapeutic terms, with particular reference to malnutrition (over-and-under-feeding), as well as metabolic and cardiovascular diseases.	

SYLLABUS

Hrs	Frontal teaching
2	Nutrients and nutritional requests
2	Characteristics of raw foods and after transformation resulting from preservation and cooking; Visual evaluation of weights and volumes of food. The FODMAP
2	Allergies and food intolerances
2	Control of appetite
3	Energy balance - direct and indirect calorimetry
3	The adipose tissue - Body composition (body compartments and techniques of measurement)
2	Energy saving and energy dissipation mechanisms Conditions associated with alterations in energy expenditure
2	Obesity-thinness, pathophysiology
2	Nutrition and metabolism, metabolic destiny of nutrients, Fasting phase and post-prandial phase
2	diet, hypertension, diabetes, metabolic syndrome
2	Diet, metabolic and cardiovascular risk Glycemic index and glucose load
2	Hereditary metabolic diseases
2	diets and healthy diet
2	Malnutrition and Cachexia