



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2017/2018		
BACHELOR'S DEGREE (BSC)	BIOMEDICAL LABORATORY TECHNIQUES		
INTEGRATED COURSE	SYSTEMATIC PATHOLOGY - INTEGRATED COURSE		
CODE	13669		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	MED/13, MED/12		
HEAD PROFESSOR(S)	PIZZOLANTI GIUSEPPE	Ricercatore	Univ. di PALERMO
OTHER PROFESSOR(S)	PIZZOLANTI GIUSEPPE	Ricercatore	Univ. di PALERMO
	CALVARUSO VINCENZA	Professore Associato	Univ. di PALERMO
CREDITS	6		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	3		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>CALVARUSO VINCENZA Monday 14:00 16:00 Sezione di Gastroenterologia, Clinica Medica I, Piazza delle Cliniche n.2.</p> <p>PIZZOLANTI GIUSEPPE Monday 12:00 13:00 Dipartimento Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"</p>		

DOCENTE: Prof. GIUSEPPE PIZZOLANTI

PREREQUISITES	<p>The student must have basic knowledge of anatomy and physiology of the digestive system.</p> <p>The student must have basic knowledge of anatomy and physiology of the endocrine glands and clinical biochemistry of the main metabolic pathways.</p>
LEARNING OUTCOMES	<p>Knowledge and understanding Acquire the skills to understand the pathophysiology, biochemistry, and molecular biology of the main endocrine and gastroenteric disorders. Understanding of the technical language used.</p> <p>Applying knowledge and understanding Apply the acquired knowledge for the recognition and the in vitro diagnostics of the main endocrine and digestive disorders.</p> <p>Making judgments Being able to properly assess, in the light of the pathophysiological mechanisms, the results of laboratory tests in selected endocrinopathies, liver and gastrointestinal disorders.</p> <p>Communication skills Show the results of studies properly, highlighting especially the effects in the prevention and therapy Learning ability Ability to integrate the informations given by the teacher with the consultation of scientific publications acquired mainly through the use of IT tools (Medline, Internet)</p>
ASSESSMENT METHODS	<p>Oral examination (consisting of at least two questions on the topics treated) aimed to achievement of the fundamental learning outcomes. The sufficiency threshold will be reached if the student shows knowledge and understanding of the issues at least in broad outline, and has application skills sufficient; he must also have presentation and argumentative skills allowing the transmission of his knowledge to the examiner. Below this threshold, the examination will be insufficient. The more the candidate will be able to interact with the examiner with his argumentative and presentation skills, and the more his knowledge and application capabilities will go into detail on the subjects under evaluation, the more the judgement will be positive.</p> <p>The evaluation is expressed using a 30-point scale. ECTS grades: A – A+ Excellent (30-30 cum laude) - Grade descriptors : Excellent knowledge of teaching contents; students should show high analytical and synthetic capabilities and should be able to apply their knowledge to solve highly complex problems. ECTS grade : B Very good (27-29) - Grade descriptors: Good knowledge of the teaching contents and excellent language control; students should show analytical and synthetic skills and be able to apply their knowledge to solve problems of medium and, in some cases, even higher complexity. ECTS grade: C Good (24-26)- Grade descriptors: Good knowledge of teaching contents and good language control; the students should be able to apply their knowledge to solve problems of medium complexity ECTS grade: D Satisfactory (21-23)- Grade descriptors: Average knowledge of the teaching contents, in some cases limited to the main topic; acceptable ability to use the specific discipline language and independently apply the acquired knowledge. ECTS grade: E Sufficient (18-20) - Grade descriptors: Minimum teaching content knowledge, often limited to the main topic; modest ability to use the subject specific language and independently apply the acquired knowledge. ECTS grade: F Fail (1-17) - Grade descriptors: Lack of an acceptable knowledge of the main teaching content knowledge; very little or no ability to use the specific subject language and apply independently the acquired knowledge. Exam failed.</p>
TEACHING METHODS	<p>The course includes lectures.</p>

MODULE ENDOCRINOLOGY

Prof. GIUSEPPE PIZZOLANTI

SUGGESTED BIBLIOGRAPHY

Faglia G. Malattie del sistema endocrino e del metabolismo. McGraw-Hill
Slide del docente

Slides given by the teacher.

AMBIT	10351-Scienze interdisciplinari cliniche
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 of the technical language used.

Applying knowledge and understanding

Apply the acquired knowledge for the recognition and the in vitro diagnostics of the main endocrine disorders.

Making judgments

Being able to properly assess, in the light of the pathophysiological mechanisms, the results of laboratory tests in selected endocrinopathies

Communication skills

Show the results of studies properly, highlighting especially the effects in the prevention and therapy

Learning ability

Ability to integrate the informations given by the teacher with the consultation of scientific publications acquired mainly through the use of IT tools (Medline, Internet)

SYLLABUS

Hrs	Frontal teaching
2	Introduction to the study of endocrinology. Historical background, concept of endocrine glands, hormones, feedback
3	Molecular action of hormones, cellular receptors, concept of second messenger, hormonal axes, Psiconeuroendocrinoimmunology
2	The laboratory in endocrine diagnostics. Stimulation and suppression tests
5	Diabetes mellitus: definition and classification. Physiology and pathophysiology of pancreatic insula. Molecular biology and immunopathology of DM. Clinical and therapy notes. The laboratory in the diagnosis of DM
5	Thyroid: anatomy, physiology and pathophysiology. Molecular biology, immunology of goitre, hyperthyroidism, hypothyroidism, Hashimoto's disease, Graves' disease. The laboratory in the diagnosis of thyroid diseases, TSH-reflex
4	Neoplastic diseases of the thyroid: molecular biology and laboratory diagnostics
1	Parathyroid: anatomy, pathophysiology, molecular biology, main diseases and laboratory diagnostics
2	Adrenal gland: anatomy, pathophysiology, molecular biology, main diseases and laboratory diagnostics
4	MEN syndromes, autoimmune polyendocrine syndromes, rare endocrine syndromes
2	Pituitary: main diseases and laboratory diagnostics

**MODULE
GASTROENTEROLOGY**

Prof.ssa VINCENZA CALVARUSO

SUGGESTED BIBLIOGRAPHY

Manuale di Gastroenterologia UniGastro (ed. 2010-2012) EGI Srl

AMBIT	10351-Scienze interdisciplinari cliniche
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INDIVIDUAL STUDY (Hrs)	45
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COURSE ACTIVITY (Hrs)	30
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EDUCATIONAL OBJECTIVES OF THE MODULE

Teaching of Gastroenterology goals are to enable the student acquisition of knowledge fundamental (theoretical and practical) that allow them to critically evaluate the relevant methodologies Gastroenterology in relation to the pathological conditions of man

SYLLABUS

Hrs	Frontal teaching
2	Peptic ulcer disease and Helicobacter Pylori
3	Celiac disease and malabsorption
3	Inflammatory bowel diseases 1. Crohn's disease 2. Ulcerative colitis
2	Neoplasms of the esophagus, stomach and colon
2	Gastrointestinal and liver damage from drugs
4	Acute and chronic viral hepatitis
2	Steatosis, steatohepatitis , damage from alcohol
4	Liver cirrhosis and hepatocellular carcinoma
2	Cholestasis and biliary obstructive disorders
3	Acute and chronic pancreatitis
3	Genetic diseases of the liver and intestine