



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Biomedicina, Neuroscienze e Diagnostica avanzata		
<b>ACADEMIC YEAR</b>	2016/2017		
<b>BACHELOR'S DEGREE (BSC)</b>	BIOMEDICAL LABORATORY TECHNIQUES		
<b>INTEGRATED COURSE</b>	SYSTEMATIC PATHOLOGY - INTEGRATED COURSE		
<b>CODE</b>	13669		
<b>MODULES</b>	Yes		
<b>NUMBER OF MODULES</b>	2		
<b>SCIENTIFIC SECTOR(S)</b>	MED/13, MED/12		
<b>HEAD PROFESSOR(S)</b>	PIZZOLANTI GIUSEPPE	Ricercatore	Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	PIZZOLANTI GIUSEPPE	Ricercatore	Univ. di PALERMO
	CALVARUSO VINCENZA	Professore Associato	Univ. di PALERMO
<b>CREDITS</b>	6		
<b>PROPAEDEUTICAL SUBJECTS</b>			
<b>MUTUALIZATION</b>			
<b>YEAR</b>	3		
<b>TERM (SEMESTER)</b>	1° semester		
<b>ATTENDANCE</b>	Mandatory		
<b>EVALUATION</b>	Out of 30		
<b>TEACHER OFFICE HOURS</b>	<p><b>CALVARUSO VINCENZA</b>  Monday 14:00 16:00 Sezione di Gastroenterologia, Clinica Medica I, Piazza delle Cliniche n.2.</p> <p><b>PIZZOLANTI GIUSEPPE</b>  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

<b>PREREQUISITES</b>	<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>
<b>LEARNING OUTCOMES</b>	<p><b>Knowledge and understanding</b> 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><b>Applying knowledge and understanding</b> Apply the acquired knowledge for the recognition and the in vitro diagnostics of the main endocrine and digestive disorders.</p> <p><b>Making judgments</b> 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><b>Communication skills</b> 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>
<b>ASSESSMENT METHODS</b>	<p>Oral examination (consisting of at least two questions on the topics treated) aimed to achievement of the fundamental learning outcomes. The examination will be evaluated in out of thirty.</p> <p>These are the criteria for evaluation.</p> <p>Excellent A - A + Excellent 30-30 laude Excellent knowledge of teaching content; the student demonstrates high analytical-synthetic capacity and is able to apply the knowledge to solve problems of high complexity</p> <p>Excellent B Very good 27-29 Excellent knowledge of teaching content and excellent properties of language; the student demonstrates analytical-synthetic capacity and able to apply the knowledge to solve problems of medium complexity and, in some cases, even high</p> <p>Good C Good 24-26 Good knowledge of teaching content and good properties of language; the student is able to apply knowledge to solve problems of medium complexity</p> <p>Discrete D Satisfactory 21-23 Good knowledge of teaching content, in some cases limited to the main topic; acceptable ability to use the specific language of the discipline and independently apply the knowledge acquired</p> <p>Sufficient E Sufficient 18-20 Minimal knowledge of teaching content, often limited to the main topic; modest ability to use the specific language of the discipline and independently apply the knowledge acquired</p> <p>Insufficient F Fail It does not have an acceptable knowledge of the main teaching content; very little or no ability to use the specific language of the discipline and independently apply the knowledge acquired</p>
<b>TEACHING METHODS</b>	<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.

<b>AMBIT</b>	10351-Scienze interdisciplinari cliniche
<b>INDIVIDUAL STUDY (Hrs)</b>	45
<b>COURSE ACTIVITY (Hrs)</b>	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

<b>AMBIT</b>	10351-Scienze interdisciplinari cliniche
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<b>INDIVIDUAL STUDY (Hrs)</b>	45
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<b>COURSE ACTIVITY (Hrs)</b>	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**

<b>Hrs</b>	<b>Frontal teaching</b>
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