



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche
ACADEMIC YEAR	2021/2022
BACHELOR'S DEGREE (BSC)	BIOTECHNOLOGIES
SUBJECT	HUMAN ANATOMY
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50081-Discipline biotecnologiche con finalità specifiche: biologiche e industriali
CODE	01286
SCIENTIFIC SECTOR(S)	BIO/16
HEAD PROFESSOR(S)	DI FELICE VALENTINA Professore Ordinario Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	6
INDIVIDUAL STUDY (Hrs)	102
COURSE ACTIVITY (Hrs)	48
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	1° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	DI FELICE VALENTINA Thursday 12:00 13:00 Sulla Chat di Teams

DOCENTE: Prof.ssa VALENTINA DI FELICE

PREREQUISITES	To understand the contents and achieve the expected objectives from teaching, the student must possess knowledge on the structure and ultrastructure of cells, on the organization of tissues.
LEARNING OUTCOMES	Knowledge and understanding: Achievement of the minimum knowledge of the human body, position and structure of individual organs. Knowledge of the relationships between the different apparatuses and alterations of anatomical and functional integrity capable of causing disease. Ability to apply knowledge and understanding: the student must be able to recognize an organ from its microscopic structure in order to be able to move easily in biomedical applications. The acquired basic knowledge is fundamental for the study of human physiology and for the understanding of etiological events capable of altering the organism's homeostasis and generating disease. Making judgments: Ability to analyze and summarize the formation of critical thinking on the topics studied and to evaluate the changes induced by the environment on the human organism. Have a critical approach in relation to the topics covered for the subsequent application in the field of biotechnological methodologies. Communication skills: Acquire the ability to describe the human body using appropriate terminology. Interact with other professional figures involved in diagnostic-therapeutic pathways through efficient group work. Learning skills: Being able to integrate among them the knowledge of cytology, histology, anatomy and physiology and human pathology in order to fully understand the complex functioning of the human body and the complex interactions between the different anatomical districts. Knowing how to understand the application and also the limitations of biotechnology applied to the biomedical field.
ASSESSMENT METHODS	Oral exam, aimed at ascertaining the acquisition of the skills and knowledge required for the teaching. The assessment will be expressed in terms of thirty marks. The candidate will be asked at least two questions. All questions are aimed at understanding processing skills and possession of sufficient expository capacity. However, if there are serious deficiencies on basic topics or on the nervous system, the exam can be stopped after only one question. Thirty marks will be awarded as shown in the table below: - Grade: 30 - 30 cum laude - Score: excellent (ECTS grade A-A + excellent) - Score: excellent knowledge of course content. The student demonstrates high analytical-synthetic skills and is able to apply knowledge to solve problems of high complexity. - Grade: 27 - 29 - Assessment: Excellent (ECTS grade B very good) Outcome: Excellent knowledge of course content and excellent language skills. The student demonstrates analytical synthetic skills and is able to apply knowledge to solve problems of moderate and, in some cases, high complexity. - Grade: 24 - 26 - Assessment: Good (ECTS grade C Good) - Outcome: Good knowledge of course content and good language skills. The student is able to apply the knowledge to solve problems of medium complexity. - Grade: 21 - 23 - Assessment: Fair (ECTS grade D Satisfactory) Outcome: Adequate knowledge of course content, partly limited to the main topics. Acceptable ability to use subject specific language and apply acquired knowledge independently. - Grade: 18 - 20 - Assessment: Sufficient (ECTS grade E sufficient) Outcome: Minimal knowledge of course content, often limited to the main topics. Moderate ability to use technical language and apply acquired knowledge independently. - Grade: 1 - 17 - Assessment: Inadequate (ECTS grade "Fail") Outcome: Does not have an acceptable knowledge of the main course content. Very little or no ability to use the technical language and apply the acquired knowledge independently. Failed exam.
EDUCATIONAL OBJECTIVES	To learn the basic knowledge of the human body in order to be able to recognize an organ and to identify the function and position. Learn the structure and function of each apparatus in order to understand Human Physiology. Learning the basic techniques of the study of Human Anatomy and modern applications in the biomedical field. The student should be able to perform scientific research in the biomedical field, and to perform biomedical instrumental diagnosis.
TEACHING METHODS	The teaching is organized in frontal hours in the classroom.
SUGGESTED BIBLIOGRAPHY	ISBN: 9788833190259 Titolo: Anatomia Umana (comprende versione ebook e contenuti digitali) Autori: Martini - Tallitsch - Nath - Timmons Editore: Edises Volume: Unico Edizione: VII 2019, edizioni dal 2015 in poi possono essere utilizzate. Volume: Single Edition: VII 2019, editions from 2015 onwards can be used.

SYLLABUS

Hrs	Frontal teaching
4	Microscopic anatomy and macroscopic anatomy. Organization levels. Basic functions of a living being. The organ systems of the human body. Position and movement terminology. Overview of all the apparatus of the human body.

SYLLABUS

Hrs	Frontal teaching
28	Basic knowledge on the following: the integumentary system, the skeletal system, the muscular system, the cardiovascular system, the respiratory system, the digestive system, the urinary system, the endocrine system, the reproductive system .
16	Cellular organization of nervous tissue, nerve impulse, sympathetic communication, anatomical organization of the nervous system, spinal cord, meninges, cerebro-spinal fluid, spinal nerves and reflexes, organization of the brain (brain stem, cerebellum, diencephalon, telencephalon), the somatic and visceral pathways of sensitivity and motility, motor, sensory and integrative areas, the Libyan system, the sense organs, the eye and the optical pathways, the ear and the acoustic pathways, the smell and taste, relationships between endocrine control and nervous control of the homeostasis of the human organism.