UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2022/2023		
BACHELOR'S DEGREE (BSC)	AUDIOPROTHESIC TECHNIQUES		
INTEGRATED COURSE	SCIENCE OF PREVENTION AND HEALTH SERVICES - INTEGRATED COURSE		
CODE	06343		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	MED/44, MED/32		
HEAD PROFESSOR(S)	SALVAGO PIETRO	Ricercatore a tempo determinato	Univ. di PALERMO
OTHER PROFESSOR(S)	CIRRINCIONE LUIGI	Ricercatore a tempo determinato	Univ. di PALERMO
	SALVAGO PIETRO	Ricercatore a tempo determinato	Univ. di PALERMO
CREDITS	6		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	3		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	**CIRRINCIONE LUIGI** Tuesday 10:00 11:00 Istituto di Medicina del Lavoro - ed. 26A Policlinico Paolo Giaccone - Via del Vespro, 143 **SALVAGO PIETRO** Wednesday 14:00 15:00 UOSD Audiologia - AOUP "P.Giaccone"		

DOCENTE: Prof. PIETRO SALVAGO

PREREQUISITES	The student should know the the anatomy and physiology of the hearing system and the audiologic disorders of adults.
LEARNING OUTCOMES	KNOWLEDGE AND UNDERSTANDING: Knowledge of the main occupational disorders and of the consequences of the cronic exposure to noise. Knowledge of the basics of law, prevention and concept of risk in the field of occupational medicine. CAPACITY TO APPLY KNOWLEDGE and UNDERSTANDING: Ability to diagnose noise exposure hearing loss and acoustic trauma among workers. JUDGMENT SKILLS: Acquisition of the minimum critical capacity to evaluate the implications of the choice of treatment and the achievable results depending on the mental and chronological age of patients. COMMUNICATION SKILLS: Ability to expose and motivate operational choices, depending on the individual characteristics of the patient, the family context and the environmental characteristics. LEARNING SKILLS: Ability to critically analyze the industry and update literature by consulting the periodic scientific literature. Ability to undertake the study towards a second level and / or master's degree courses.
ASSESSMENT METHODS	The oral exam is an interview, aimed at determining whether the candidate has developed the skills and the disciplinary knowledge provided by the course; the evaluation is expressed in thirtieths. The questions (input), both open and semi-structured and specifically designed to test the results of learning provided, will verify a) the acquired knowledge; b) the processing capabilities, c) the possess of an adequate capacity to discuss the topics of the exam. a) As regards to the verification of knowledge, the ability to make connections between contents (theories, models, tools, etc.) will be required. b) Concerning the verification of processing capacity, at least one of the following three objectives will be indicated: b1) to provide independent judgments regarding the disciplinary contents; b2) to understand the applications or implications of the aforementioned judgments within the discipline; b3) to place the disciplinary contents within the professional, technological or socio-cultural context of reference. The maximum score is obtained if the exam verifies the full possession of the following three skills: a capacity of judgment able to represent emerging and / or little explored aspects of the discipline; a marked ability to represent the impact of course's contents within the sector / discipline in which they are; finally, a mastery of the ability to represent innovative ideas and / or solutions within the professional, technological or socio-cultural context of reference. c) Regarding the verification of the ability to show the acquired knowledge, a minimum evaluation will be achieved when the examiner demonstrates that the candidate exhibits a language property appropriate to the professional context of reference but not sufficiently articulated, while the maximum evaluation can be achieved by candidates who demonstrate full mastery of the sectorial language.
TEACHING METHODS	Lessons

MODULE
OCCUPATIONAL MEDICINE

Prof. LUIGI CIRRINCIONE

SUGGESTED BIBLIOGRAPHY

Lorenzo Alessio, Pietro Apostoli "Manuale di medicina del lavoro e igiene industriale" - Piccin-Nuova Libraria ISBN: 978-88-2992-020-4
Lacca G., Miceli A., Bastone S. "Compendio di Medicina del Lavoro" Ed. Minerva Medica 2019 ISBN: 978-88-7711-987-2

AMBIT	10350-Scienze della prevenzione e dei servizi sanitari
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Identification of issues related to environmental conditions of work, preventive interventions for resolution. Knowledge of the rules that protect workers' health.

SYLLABUS

Hrs	Frontal teaching
3	Hygienic principles
3	Risk assessment
3	Accidents at work and occupational disease. Other forms of insurance
3	The physical hazards (ionizing and non-ionizing radiation, noise, vibration, electricity, ROA)
3	The chemical risks (chemicals, carcinogenic, mutagenic)
3	The biological risks (occupational infections)
6	The organizational risks (manual handling of loads, VDU, awkward postures)

MODULE
INDUSTRIAL AUDIOLOGY

Prof. PIETRO SALVAGO

SUGGESTED BIBLIOGRAPHY	
-Materiale didattico fornito dal docente	
AMBIT	10348-Scienze e tecniche audioprotesiche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
EDUCATIONAL OBJECTIVES OF THE MODULE	
After completing the Industrial Audiology Course the student must: -Know the charachteristics of noise in work environment and how to measure it; -Know noise-induced damage and clinical picture and audiologic testing in case of occupational hearing loss; -Know laws and regulations relative to noise exposure and civil disability.	

SYLLABUS

Hrs	Frontal teaching
2	Sound wave and industrial noise: characteristics of sound waves, classification and evaluation criteria; relationship between noise and ear.
3	Noise-induced hearing loss: acute acoustic trauma. Ear barotrauma. Combined exposure to Noise and Ototoxic Substances.
3	Clinical picture of noise-induced hearing loss. risk factors for hearing loss. Noise damage on the body.
3	Noise-induced hearing loss diagnosis. Differential diagnosis to other hearing pathologies. Audiology tests in noise-induced hearing loss.
3	How to measure noise: tests: Equivalent Continuous Sound Pressure Level. Peak Sound Pressure. dBA and dBC. Weighted sound levels. Noise exposure on hearing function: temporary and permanent threshold shift.
2	D.lgs. 9 aprile 2008, n. 81. Testo coordinato con il D.Lgs. 3 agosto 2009, n. 106. PROTECTION OF WORKERS AGAINST THE RISKS OF EXPOSURE TO NOISE DURING WORK. Lower action values, higher action values and exposure limit values.
3	Risk assessment. The sound level meter. The phonometric evaluation.
2	Primary prevention (technical and environmental): hearing protection devices, characteristics and attenuation.
3	Presbycusis and socioacusis. Work suitability and audiology. Audiology and INPS.
3	Audiometry and civil disability. INAIL: audiometric curves and hearing aids.
3	Audiology and Legal medicine. Hearing aids and Law. Noise pollution.