



# UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro"		
ACADEMIC YEAR	2022/2023		
MASTER'S DEGREE (MSC)	NURSING AND MIDWIFERY		
INTEGRATED COURSE	APPLIED EPIDEMIOLOGICAL METHODOLOGY - INTEGRATED COURSE		
CODE	18000		
MODULES	Yes		
NUMBER OF MODULES	3		
SCIENTIFIC SECTOR(S)	MED/42, ING-INF/05, BIO/14		
HEAD PROFESSOR(S)	IMMORDINO PALMIRA	Ricercatore a tempo determinato	Univ. di PALERMO
OTHER PROFESSOR(S)	IMMORDINO PALMIRA	Ricercatore a tempo determinato	Univ. di PALERMO
	RANDAZZO ALESSANDRO	Professore a contratto	Univ. di PALERMO
	MOTTA ORAZIO	Professore a contratto	Univ. di PALERMO
CREDITS	9		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	1		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p><b>IMMORDINO PALMIRA</b> Thursday 14:00 16:00 studio del docente presso la sezione di Igiene del dipartimento promise via del vespro, 133 90127 Palermo (policlinico). Si prega di concordare l'appuntamento previa email al docente palmira.immordino@unipa.it</p> <p><b>RANDAZZO ALESSANDRO</b> Wednesday 18:00 19:00 Per coloro che necessitano di ulteriori spiegazioni riguardo lezioni ed esercizi. Ricevo il mercoledì tramite piattaforma teams dalle 18 alle 19</p>		

<b>PREREQUISITES</b>	Knowledge of the biological agents. Characteristic of pathogenic and opportunistic microorganisms. Evaluation of the possible interactions between microorganisms and the environment.
<b>LEARNING OUTCOMES</b>	<p>Ability to apply knowledge and understanding</p> <p>Be able to perform basic diagnostic and technical procedures, know how to analyze and interpret the results, in order to define correctly the nature of a problem</p> <p>Know the appropriate use of human resources, diagnostic interventions, of therapeutic modalities and technologies dedicated to health care</p> <p>Be aware of the important role of health and health determinants disease and ability to know how to take adequate preventive and protective actions in</p> <p>against diseases, injuries and accidents, while maintaining and promoting health of the individual, of the family and of the community</p> <p>Be aware of the roles and responsibilities of other staff</p> <p>health care in providing health care</p> <p>Autonomy of judgment</p> <p>Be aware of the need for continuous professional improvement with the awareness of one's own limits, including those of one's own knowledge</p> <p>medical</p> <p>Respect colleagues and other health professionals, demonstrating excellent ability to establish collaborative relationships with them</p> <p>Communication skills</p> <p>Interact with other professionals involved in patient care through efficient teamwork</p> <p>Knowing how to create and maintain good medical records</p> <p>Learning skills</p> <p>Being able to collect, organize and interpret correctly health and biomedical information from the various resources and databases available</p> <p>Knowing how to use the technology associated with information and communications</p> <p>as a proper support to diagnostic, therapeutic and preventive practices</p>
<b>ASSESSMENT METHODS</b>	<p>Evaluation: Mark. Type of exam: Oral exam.</p> <p>The test aims at evaluate if the student has knowledge and understanding of the topics of the integrated teaching / course program, independent judgment, ability to apply the acquired knowledge, specific disciplinary language.</p> <p>Minimum number of questions: The student must answer a minimum of three questions, posed orally, which will focus on all the topics of the integrated teaching / course program, with reference to the texts recommended.</p> <p>Evaluation and its criteria: The evaluation is out of thirty, as reported in diagram below.</p> <p>Excellent</p> <p>30- 30 and praise excellent knowledge of the topics, excellent property of language, good analytical skills, the student is able to apply the knowledge to solve the proposed problems;</p> <p>very good</p> <p>26-29 - Good command of topics, full ownership of language, the student is able to apply the knowledge to solve i problems proposed.</p> <p>Good</p> <p>24-25 -Basic knowledge of the main topics, fair properties of language, with limited ability to autonomously apply knowledge to the solution of the proposed problems.</p> <p>Satisfactory</p> <p>21-23 - Does not have full command of the main teaching topics but he possesses the knowledge, satisfactory property of language, scarce ability to autonomously apply the acquired knowledge.</p> <p>Enough</p> <p>18-20 - Minimum basic knowledge of the main teaching topics e of technical language, very little or no ability to apply knowledge acquired.</p> <p>Insufficient</p> <p>He does not have an acceptable knowledge of the contents of the topics covered in teaching.</p>
<b>TEACHING METHODS</b>	Lectures

## MODULE CREATION AND MANAGEMENT OF SANITARY DATA BASES

*Prof. ALESSANDRO RANDAZZO*

### SUGGESTED BIBLIOGRAPHY

Paolo Atzeni, Stefano Ceri, Piero Fraternali, Stefano Paraboschi, Riccardo Torlone "Basi di dati, V ed.", McGraw-Hill, 2018.  
Le basi di dati per medicina e farmacia, Manghi, McGraw-Hill, 2018.EAN: 9788838694455

<b>AMBIT</b>	20386-Scienze informatiche applicate alla gestione sanitaria
<b>INDIVIDUAL STUDY (Hrs)</b>	51
<b>COURSE ACTIVITY (Hrs)</b>	24

### EDUCATIONAL OBJECTIVES OF THE MODULE

The module aims to provide the basic elements to understand the methodologies and the technical-applicative aspects for the treatment of health information through IT technologies. The architecture of a health information system will be illustrated, and in particular the application of the electronic medical record to the management of the patient's care path. The student will acquire notions about the commonly used coding in medicine, and about the normative aspects related to the protection of personal data. In addition, indications will be provided for the construction of a business intelligence platform for the analysis of health data collected. The application aspects will be illustrated by referring to the information system in use at the P. Giaccone University Hospital in Palermo.

## SYLLABUS

Hrs	Frontal teaching
2	Basics of computer architecture
2	Basics on the representation of information
4	Architecture of a hospital information system
2	Querying a database
6	The application of the electronic medical record
2	Codifications in medicine
1	Regulatory aspects of privacy
1	Protection of information and new regulation on the protection of personal data - GDPR
Hrs	Practice
2	Build an application system for collecting medical history information
2	Build a business intelligence platform

## MODULE PHARMACO-EPIDEMIOLOGY

*Prof. ORAZIO MOTTA*

### SUGGESTED BIBLIOGRAPHY

Karen Whalen Le basi della farmacologia, Zanichelli ed. 2020. Caputi AP, De Ponti F, Pagliaro L. Reazioni avverse a farmaci - sospetto e diagnosi. Raffaello Cortina Editore, Milano 2009.

<b>AMBIT</b>	20375-Scienze biomediche
<b>INDIVIDUAL STUDY (Hrs)</b>	51
<b>COURSE ACTIVITY (Hrs)</b>	24

### EDUCATIONAL OBJECTIVES OF THE MODULE

At the end of the study the student will be able to define different adverse drug reactions on the basis of pharmacological mechanism and with a good knowledge of ADR classification. The student will be able to clarify the limits of clinical trials; explain the objectives and methods of pharmacoepidemiology.

## SYLLABUS

Hrs	Frontal teaching
2	Pharmacokinetics:The dynamics of drug absorption, distribution
2	Drug Metabolism
2	Excretion of drug
2	Pharmacodynamics
4	Pharmacokinetics and Pharmacodynamics variability:individual and population
4	Post-Marketing Surveillance, Adverse Drug Responses
4	Trials clinici – Phase I,II,III and IV
4	Pharmacoepidemiology: methods and sources

## MODULE HYGIENE AND PREVENTIVE MEDICINE

*Prof.ssa PALMIRA IMMORDINO*

### SUGGESTED BIBLIOGRAPHY

Igiene, medicina preventiva e salute globale. DATA PUBBLICAZIONE: Gennaio 2022; ISBN: 978-88-299-3245-0; AUTORI: Auxilia - Pontello.

<b>AMBIT</b>	20377-Statistica ed epidemiologia
<b>INDIVIDUAL STUDY (Hrs)</b>	51
<b>COURSE ACTIVITY (Hrs)</b>	24

### EDUCATIONAL OBJECTIVES OF THE MODULE

The course aims to expand knowledge and skills related to health prevention and health promotion of the individual as well as the community; it also provides knowledge on the structural, organizational and managerial aspects of the national health system.

The student will then be able to understand what the determinants of health and the health surveillance systems are; to understand the mechanisms of onset and spread of infectious diseases and their impact on the community; to learn the principles and strategies of preventive medicine and health promotion and the legal framework governing health care organization and first level of healthcare.

It is considered essential for a health professional to be able to analyze and interpret epidemiological data and specific risk indicators, to define the nature of a health issue and to plan and implement a strategy to solve it both individually and collectively.

## SYLLABUS

Hrs	Frontal teaching
3	Definition and objectives of Hygiene and Public Health: definition and general objectives of Primary, Secondary and Tertiary Prevention.
2	General prophylaxis of infectious diseases: General aspects, Notification, Epidemiological investigation, Diagnostic assessment, Disinfection, Sterilization.
5	Epidemiology and prevention of the main infectious diseases: fecal / oral, air, sexual / parenteral and vectors transmission..
2	Healthcare-associated infections: etiology, sources and reservoirs, modes and routes of transmission, risk factors, control and prevention.
5	Infectious diseases prophylaxis: immunoprophylaxis; vaccines made of attenuated or inactivated microorganisms, anatoxins, purified antigens, recombinant and genetic vaccines. Combined vaccines. Vaccine administration route and site, controindications, adverse reactions. Vaccine schedules. Recommended vaccinations for healthcare professionals. Passive immunoprophylaxis: heterologous serum, immunoglobulins, routes of administration, serum reactions. Chemoprophylaxis: chemoprevention and chemo protection.
2	General epidemiology of non-communicable diseases: individual risk factors and environmental risk factors.
3	Prevention of non-communicable diseases: primary prevention: change of behavior, interventions on the environment; secondary prevention: population screening; tertiary prevention.
2	Health organization. Health organization in Italy. National Health Plan. Health Authorities, Essential Levels of Assistance.