



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche		
ACADEMIC YEAR	2018/2019		
MASTER'S DEGREE (MSC)	MOLECULAR AND HEALTH BIOLOGY		
SUBJECT	HYGIENE		
TYPE OF EDUCATIONAL ACTIVITY	B		
AMBIT	50505-Discipline del settore biomedico		
CODE	03795		
SCIENTIFIC SECTOR(S)	MED/42		
HEAD PROFESSOR(S)	CASUCCIO	Professore Ordinario	Univ. di PALERMO
	ALESSANDRA		
OTHER PROFESSOR(S)			
CREDITS	6		
INDIVIDUAL STUDY (Hrs)	100		
COURSE ACTIVITY (Hrs)	50		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	1		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>CASUCCIO ALESSANDRA</p> <p>Tuesday 11:00 13:00 Si riceve previo appuntamento con il docente scrivendo alla email: alessandra.casuccio@unipa.itLa sede dello studio e sita al primo piano del dipartimento di Promozione della Salute, Materno Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro" (Policlinico), via del vespro, 133, 90127 Palermo</p> <p>Thursday 11:00 13:00 Si riceve previo appuntamento con il docente scrivendo alla email: alessandra.casuccio@unipa.itLa sede dello studio e sita al primo piano del dipartimento di Promozione della Salute, Materno Infantile, di Medicina Interna e Specialistica di Eccellenza "G. D'Alessandro" (Policlinico), via del vespro, 133, 90127 Palermo</p>		

DOCENTE: Prof.ssa ALESSANDRA CASUCCIO

PREREQUISITES	In order to approach the study of Hygiene, students must possess basic knowledge on cellular biology and pathophysiology aimed at the understanding the pathological mechanisms for the community and the safeguarding of public health. Also, knowledge of basic physiology is necessary in order to understand and investigate the dynamics for the promotion of human health.
LEARNING OUTCOMES	LEARNING EXPECTED RESULTS Knowledge and ability to understand. After completing the course the student must have acquired adequate knowledge of basic epidemiological methodology in order to know how to organize and analyze data related to biomedical phenomena, particularly regarding human health. Capacity to apply knowledge and understanding At the end of the course the student will be able to run verification of environmental and health risk for the population. Judgement skills At the end of the course the student will be able to obtain an correct interpretation of the results emerging from epidemiological surveys on environmental and human health. Empowering communication The course aims to make students able to understand and appropriately communicating information concerning the main goals of prevention related to the individual and collective health. Capability Learning The student must be able to analyze the sanitary problems in a preventive perspective by careful retrospective and prospective analysis intended to promote the health factors and prevent disease by reducing risk factors or eliminating the causes of the same .
ASSESSMENT METHODS	The student must answer orally at least three questions on all the topics of the program, with reference to the suggested texts. The final exam aims at assessing whether the student has knowledge and understanding of the issues, has acquired interpretative skills and autonomy for the assessment of concrete cases. The sufficient threshold will be reached if the student shows the knowledge and understanding of the arguments at least in the general guidelines and has minimal application skills for concrete case resolution. The student should also have the ability to expose and discuss that will allow him to convey his knowledge to the examiner. Below this threshold, the examination is inadequate. Moreover, the more the student will be able to interact with the examiner and his knowledge and application skills will go deeper into the topic, the more the evaluation will be positive. The evaluation is done in thirty/thirty. In detail, the vote will be based on the following principles: Excellent (30-30 e lode) Excellent knowledge curricular content; the student demonstrates high analytic-synthetic capacity and is able to apply the knowledge to solve problems of high complexity. Very good (27-29) Excellent knowledge of curricular 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 of high complexity. Good (24-26) Good knowledge of curricular content and good properties of language; the student is able to apply knowledge to solve problems of medium complexity. Satisfactory (21-23) Good knowledge of curricular content, in some cases limited to the main topic; acceptable ability to use the specific language of the course and independently to apply the knowledge acquired. Sufficient (18-20) Basic knowledge of curricular content, often limited to the main topic; modest ability to use the specific language of the course and independently to apply the knowledge acquired. Fail (<18) Lack of an acceptable knowledge of the curricular content; very little or no ability to use the specific language of the course and independently apply the knowledge acquired.
EDUCATIONAL OBJECTIVES	OBJECTIVES OF COURSE The educational objectives of teaching of Hygiene can be summarized as follows: • provide knowledge on the concept of health promotion; • provide epidemiological notions, Hygiene branch that represents the fundamental tool to identify the causes and risk factors of the disease, the protective factors for human health, as well as the mode of transmission and spread of disease within the population, with particular reference to the environmental matrices; • provide knowledge about the main preventive interventions of diseases (both infectious and non-infective): removal of the causes of damage to health; removal of risk factors; strengthening of healthiness factors. Particular reference will be made to the control of living and working environments by considering the fundamentals of prevention regarding the

	chemical, biological, and physical as well as' the environmental legislation.
TEACHING METHODS	Classroom lessons; laboratory exercises in microbiology
SUGGESTED BIBLIOGRAPHY	F. Vitale, M. Zagra - Igiene, epidemiologia e organizzazione sanitaria orientate per problemi, Elsevier - Masson. Altri riferimenti bibliografici e materiale didattico verra' fornito dal docente sul sito dell'insegnamento.

SYLLABUS

Hrs	Frontal teaching
2	Definitions and purposes of Hygiene. Demographics, structure and development of populations.
2	Health status of the population. The health and its determinants.
2	The epidemiological methodology, definition, characteristics and goals.
2	Descriptive and analytical epidemiology. Prospective and retrospective epidemiological studies.
2	The indicators of health.
2	The mono-and multifactorial diseases. The causes, risk factors and causative factors of the disease.
2	The prevention of pathological events: primary, secondary and tertiary prevention.
2	Epidemiology of communicable diseases. Etiologic agents of communicable diseases. The transmission of infections. Host-parasite relationship. Etiology, pathogenesis,
2	epidemiology and prevention of diseases transmitted by air,
2	epidemiology and prevention of diseases transmitted by fecal-oral route,
2	epidemiology and prevention of diseases transmitted by sexually or parenterally route
2	epidemiology and prevention of diseases transmitted via mother-child
2	Prevention of communicable diseases. Disinfection, sterilization and disinfection. The nonspecific and specific host defenses. The antibody response of the host.
2	Prophylactic measures : vaccine prophylaxis, serum injection and chemoprophylaxis.
2	Vaccinations: general methods of preparation. Calendar of vaccination in Italy.
2	Epidemiology of chronic degenerative diseases. Mechanisms of interaction between man and environment. The modifiable risk factors and non-modifiable environmental risk factors.
2	Primary and secondary prevention of chronic degenerative diseases.
2	Environment and human health: the causes of disease and risk factors of environmental origin. Use of indicators to describe the relationship between environment and health.
2	Food and human health. Classification of diseases transmitted through food: infections, poisoning, and food poisoning. The fundamental principles of HACCP (Hazard Analysis Critical ControlPoint).
2	Importance of environmental hygiene. Air pollution and health.
2	Indicators of air quality, features, changes and problems of the major airborne pollutants. Indoor air pollution.
2	The water in nature and sources of supply. Water consumption and water contamination. Features (organoleptic, chemical, physical and microbiological) of water for human consumption and recreational use. Treatment of drinking water. Water pollution and health.
Hrs	Practice
3	exercises in the laboratory of microbiology on clinical diagnostic aspects
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