



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2017/2018		
BACHELOR'S DEGREE (BSC)	MEDICAL AND IMAGE DIAGNOSTICS AND RADIOTHERAPY TECHNIQUES		
INTEGRATED COURSE	PHARMACOLOGY, CONTRAST MEDIA AND ANAESTHESIOLOGY - INTEGRATED COURSE		
CODE	15287		
MODULES	Yes		
NUMBER OF MODULES	3		
SCIENTIFIC SECTOR(S)	BIO/14, MED/41, MED/36		
HEAD PROFESSOR(S)	GALIA MASSIMO	Professore Ordinario	Univ. di PALERMO
OTHER PROFESSOR(S)	CANNIZZARO EMANUELE	Professore Associato	Univ. di PALERMO
	GALIA MASSIMO	Professore Ordinario	Univ. di PALERMO
	CORTEGIANI ANDREA	Professore Associato	Univ. di PALERMO
CREDITS	9		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	2		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	CANNIZZARO EMANUELE Monday 09:30 11:00 Medicina del Lavoro. Primo piano stanza docente CORTEGIANI ANDREA Monday 10:00 12:00 1 piano Dipartimento di anestesia e riamimazione GALIA MASSIMO Monday 9:00 12:00 Sezione di Scienze Radiologiche, stanza n. 93, primo piano. Dipartimento di Biomedicina, Neuroscienze e Diagnostica avanzata.		

DOCENTE: Prof. MASSIMO GALIA

PREREQUISITES	gli studenti devono avere la conoscenza delle basi anatomofisiologiche delle patologie di base e della farmacologia
LEARNING OUTCOMES	ci si attende a fine corso che lo studente riconosca i principali quadri di urgenza e ne individui le cause e la possibilita' terapeutica nonche' abbia acquisito le nozioni di base delle manovre di rianimazione di primo livello
ASSESSMENT METHODS	la valutazione avviene attraverso una prova orale sugli argomenti discussi durante il corso con voto in trentesimi scandendo la valutazione in tre steps da 18 a 24/30 se le conoscenze sono elementari, da 25 a 27/30 se sono medie , da 28 a 30/30 con lode se sono ottime e /o eccellenti con padronanza del linguaggio e chiara esposizione.
TEACHING METHODS	che course includes front lessons and practical exercises with a simulator

MODULE ANAESTHESIOLOGY

Prof. ANDREA CORTEGIANI

SUGGESTED BIBLIOGRAPHY

Tiberio-Randazzo et al Emergenze Medico Chirurgiche Elsevier Masson Edit.
E. ROMANO, Anestesia - I Principi e le Tecniche, UTET.
P. ROSEN, Emergency Medicine, vol. I, II, Mosby, II edizione.
R.D. MILLER, Anesthesia, Churchill Livingstone, III edizione.
J.M. CIVETTA, Critical Care, J.B. Lippincott, Philadelphia, 1988. Textbook of Advanced Cardiac Life Support, American Heart Association, II edizione. Health Care Provider's Manual for Basic Life Support, American Heart Association. Critical Care Diagnosis & Treatment, edited by F.S. Bongard & D.Y. Sue, Lange Medical Book. Emergency Diagnosis & Treatment, edited by C.E. Saunders & M.T. Ho, Lange Medical Book.
NOVELLI ET AL., Anestesia, Rianimazione ed Emergenze Medico-Chirurgiche, Gnocchi, Napoli, 1995.

AMBIT	10339-Primo soccorso
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

at the end of the course the student must demonstrate knowledge and capacity of understanding regarding the anesthesia techniques, CPR as well as the action and use of emergency medications , efficacia mechanism.
know made rational choices about drug therapies, anesthesia and intensive care to be applied in various pathological conditions, taking into account the specific characteristics of individual patient and in optics for a proper evaluation of the benefit-cost ratio.
judgment:
integrate knowledge , making judgment based on incomplete or limited information, but that include reflecting on the responsibilities related to the application of its knowledge and judgment as regards the applications of the same in the field of resuscitation and pharmacological. learn to listen carefully to understand and synthesize information on all drug problems, anesthesia and resuscitation and know then communicate the content effectively in both oral and written form.
be able to gather and organize, properly interpret information about drug for anesthesia and resuscitation by the different resources and databases

SYLLABUS

Hrs	Frontal teaching
8	general anesthesia
4	monitoring of vital signs
2	pain guidelines
4	cardiopulmonary resuscitation
4	extra-hospital emergencies
4	locoregional anesthesia
Hrs	Workshops
4	bls-d

MODULE PHARMACOLOGY

Prof. EMANUELE CANNIZZARO

SUGGESTED BIBLIOGRAPHY

Goodman&Gilman Le basi farmacologiche della terapia. McGraw-Hill

Rang, Dale, Ritter, Flower. Farmacologia.

Elsevier Masson Cannizzaro G principi di Farmacologia Generale.

Edilson Gnocchi Farmacologia Generale e Clinica di B. G Katzung, Edizioni Piccin Padova

AMBIT	10339-Primo soccorso
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INDIVIDUAL STUDY (Hrs)	45
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COURSE ACTIVITY (Hrs)	30
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EDUCATIONAL OBJECTIVES OF THE MODULE

Knowing the basics of pharmacokinetics and pharmacodynamics, the different classes of drugs, the molecular and cellular mechanisms of their action, therapeutic uses, the variability 'response in relation to genetic and pathophysiologic factors, the drug interactions and the definition of criteria regimens, as well as 'the principles and methods of clinical pharmacology, including pharmacological surveillance and pharmaco-epidemiology, side effects and toxicity' of drugs and substances of abuse.

SYLLABUS

Hrs	Frontal teaching
30	Introduction. Definition of medication. Origin and procurement of medicines. Stages of testing drugs. Pharmacovigilance. Pharmacokinetics. pharmacokinetic phases. Role of pharmacokinetics in the Pharmacodynamics of a drug. Absorption: the passage of drugs through biological membranes. Influence of pH on the absorption of drugs, the pKa of the route of administration influence on the absorption and the effect of a drug. routes of administration. Criteria for choosing the route of administration. Bioavailability. Distribution. Study of pharmacokinetic curves "Steady state". drug-protein binding. Metabolism. pharmacokinetic tolerance. Elimination. Principles of toxicology. adverse effects of drugs, teratogenicity. diagnostic and therapeutic approach to the most 'common acute poisoning. Pharmacodynamics. Concept and role of receptors in the activities' of drugs. agonists, antagonists and inverse agonists. dose study of relationships / effect. Tolerance and resistance. Tachyphylaxis. Variability 'of drug action. Therapeutic Index. Association between drugs: pharmacokinetic and pharmacodynamic character interactions. Side effects from medications. Pharmacology of the Autonomic Nervous System. Pharmacology of pain. anti-inflammatory drugs, anti-allergic and immunosuppressive. Chemotherapy of infectious diseases.

MODULE
IMAGE DIAGNOSTICS, CONTRAST RADIOLOGY

Prof. MASSIMO GALIA

SUGGESTED BIBLIOGRAPHY

Passariello Roberto
Radiologia - Elementi di Tecnologia
2005 Quarta Edizione - Volume in 4° di pagine XXVI-638 con 842 figure a colori e b/n e 113 tabelle.
Casa Editrice: Idelson
ISBN: 88-7947-392-1

AMBIT	10342-Scienze e tecniche di radiologia medica per immagini e radioterapia
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Aim of the Course is to provide to the students the necessary knowledge on contrast mediums, with reference to their characteristics and indications for clinical use. Protocols of contrast medium administration, contraindications and adverse effects will be showed. The characteristics and appropriateness of the use of iodinated contrast mediums, extracellular and hepatobiliary gadolinium chelates and ultrasound contrast agents will be discussed.

SYLLABUS

Hrs	Frontal teaching
9	Contrast mediums: classification and characteristics.
9	Clinical applications of contrast mediums.
4	How to recognize and to treat adverse reactions after contrast mediums administration.
4	Guidelines for contrast medium administration.

Hrs	Practice
4	Guidelines for contrast medium administration.