



UNIVERSITY OF L'AQUILA



Department of Health, Life and
Environmental Sciences

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE

Laurea in
TERAPIA DELLA NEURO E PSICOMOTRICITA' DELL'ETA' EVOLUTIVA

Course Catalogue

Academic year starts the last week of September and ends the first week of June.

1st Semester - Starting date: last week of September, end date: 3rd week of January

2nd Semester - Starting date: last week of February, end date: 1st week of June

Exams Sessions: I) from last week of January to 3rd week of February, II) from 2nd week of June to end of July, III) from 1st to 3rd week of September.

Comprehensive Scheme of the 1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE					
YEAR	CODE	COURSE	Credits (ECTS)	Semester	
I	D4588	Elements of Anatomy and Physiology	6	1	
	D4232	Foundations of Psychology and Informatic Models	10	1	
	D4233	Radioprotection Techniques	3	1	
	D3680	Social Medicine	6	2	
	D2748	Business Economics and Labor Law	6	2	
	D3676	Rehabilitation Techniques and Methods	6	2	
			D3638 - Internship I	18	2
II	D2670	Neurosciences	9	1	
	D3678	Neuro and Psycho-motor Techniques and Methods in Pediatric Pathologies	6	1	
	D2656	Cognitive Rehabilitation and Re-education	6	1	
	D2686	Rehabilitation of Neuro and Psycho-Pathology	9	2	
	D4059	Medical Sciences	10	2	
			D3640 - Internship II	17	2
III	D2718	Learning Process Re-education	10	1	
	D4176	Neuro and Psycho-motricity	6	1	
	D1100- D2182	Audiology and Visual Apparatus Pathology	3	2	
			D3642 - Internship III	23	2
			<i>Free choice Courses / Activities</i>	6	1 and 2
			<i>Other activities</i>	12	1 and 2
			Thesis	6	2

**Programme of “ELEMENTI DI ANATOMIA E FISIOLOGIA”
“ELEMENTS OF ANATOMY AND PHYSIOLOGY”:**

This course is composed of two Modules: 1) Neurophysiology, 2) Neuroanatomy

Number of ECTS credits: 6 (workload is 150 hours; 1 credit = 25 hours)

D4588, Compulsory

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 1st year, 1st semester

1) NEUROPHYSIOLOGY (3 ECTS)

Teacher: Luciano DOMENICI

1	Course objectives and Learning outcomes	<p>The goal of the course is to provide a systematic presentation of physiological concepts. It is essential that all health professional students receive sufficient exposure to the physiological concepts that provide the foundations needed for further studies. The curricular objectives are focused primarily on normal body function. However, this material is presented in a context that prepares students for their roles and, accordingly, anatomical, pharmacological as well as clinical examples are used to illustrate the underlying physiological principles.</p>
2	Dublin descriptors	<p>Topics of the module include:</p> <p>I. General neurophysiology</p> <ol style="list-style-type: none"> 1. Functional organization of the human body and control of the 'internal environment. 2. The neuronal membrane. 3. Generation of endogenous potentials; equation of Nerst for principal ions and leakage ion channels. 4. Membrane potentials: action potentials and voltage-dependent channels, refractory period. Conduction of action potentials, conduction velocity as a function of axon diameter and myelin sheathing. 5. Synapses; electric and chemical synapses. Chemical synapses: the process of neurotransmitter release, ionotropic and metabotropic receptors for neurotransmitters, post-synaptic responses in dendrites, spatial and temporal summation. 6. Excitation of skeletal muscle: neuromuscular transmission and excitation-contraction coupling. Contraction of skeletal muscle. 7. Spinal reflexes. <p>II. Sensory physiology</p> <ol style="list-style-type: none"> 1. Somato-sensory and pain perception. 2. Visual system. 3. Acoustic system. 4. Vestibular system. 5. Gusto-olfactory senses. <p>III. Motor physiology</p> <ol style="list-style-type: none"> 1. Organization of voluntary movement, 2. Role of cerebellum and basal nuclei. <p>IV. The circulation and the heart</p> <ol style="list-style-type: none"> 1. Composition of blood. Red blood cells.. Overview of the circulation; biophysics of pressure, flow, resistance. 2. Cardiac muscle: the heart as a pump and function of the heart muscles. 3. Rhythmical excitatory and conductive system of the heart.. Potentials generated by excitation of cardiomyocytes. 4. The normal electrocardiogram. 6. Cardiac contraction and the phases of cardiac cycle. Stroke and cardiac output. <p>V. Respiratory system and Respiration</p> <ol style="list-style-type: none"> 1. Air flow in respiratory pathways: morphology and function of the upper airways, pharynx and larynx, different orders of bronchi, lung and alveolar cell types. 2. Pulmonary ventilation: volumes and pulmonary capacities measured by spirometer.. Resistance through the airways. 3. Respiration. Physical principles of gas exchange; diffusion of oxygen and carbon dioxide through the respiratory membrane. 4. Respiration: transport of oxygen and carbon dioxide in blood and tissue fluids. 6. Regulation of respiration by the nervous system and respiratory brain stem centers. Central detection of carbon dioxide. Peripheral regulation of respiration. <p>VI. Principles of organization of the renal system.</p> <p>Renal functional anatomy, The concept of clearance. Glomerular and tubular function. The formation of urine.</p>

		<p>VII. Principles of organization of the endocrine system.</p> <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have knowledge of physiology o have knowledge and understanding of physiological basic concepts and principles o understand and explain physiological basic concepts and principles o demonstrate skill in physiology and ability to illustrate physiological principles in the context of the integrative course o demonstrate capacity for reading and understand other texts and consult scientific data-base on related topics.
3	Prerequisites and learning activities	None
4	Teaching methods and language	<p>We develop didactic mechanisms to assure that the students are being inculcated with physiological basic principles and concepts at appropriate depth of understanding. All of the objectives are attained using multiple teaching formats. During the course the faculty is continuously in contact with students also using internet to discuss doubts and unclear concepts illustrated during the course.</p> <p>Meetings with faculty of other modules of the integrative course.</p> <p>Language:The course is in Italian and, if needed, we can explain the major concepts in English</p> <p>Ref. Textbooks:</p> <p>-Germann WJ, Stanfield CL. <i>Principles of Human Physiology</i>. Benjamin-Cummings Pub Co, 2004</p>
5	Assessment methods	Final oral exam. Progress exams are also planned during the course
2) NEUROANATOMY (3 ECTS)		
Teacher: Roberta SFERRA		
1	Course objectives and Learning outcomes	The course aim is to provide knowledge regarding theoretical concepts to various human organ systems.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Overview of the human body and anatomic nomenclature. - Overview of musculoskeletal system. - Cardiovascular system: mediastinum, heart and great vessels. Overview of lymphatic system. - Respiratory system: Upper airways, trachea and bronchi. Lungs and Pleura. - Overview of Digestive system. - Urogenital system: Kidney and urinary tree. General aspects of female and male reproductive systems. - Endocrine system. - Nervous system: spinal cord and spinal nerves. Brain stem. Cerebellum. Diencephalon. Cerebral hemisphere. Cranial nerves. - Special senses: external, middle and inner ear. The eye. The orbit and accessory visus apparatus. <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have knowledge and understanding of gross and functional anatomy of the nervous system o explain different human body systems o make a judgment on the involvement of different body systems o demonstrate skills in anatomy and ability to illustrate the human organ system in the context of the integrative course o demonstrate capacity for reading and understand other texts on related topics.
3	Prerequisites and learning activities	The student must know the basic structure and function of cells and integrating cells into tissues.
4	Teaching methods and language	<p>Lectures, team work, home work.</p> <p>Language: Italian</p> <p>Ref. Text books:</p> <p>-AA.VV. <i>Anatomia dell'uomo</i>. Edi-Erme, 2006</p> <p>-Carinci P, Gaudio E, Marinozzi G. <i>Anatomia Umana e Istologia</i>. Elsevier, 2012</p> <p>-Grasso G. <i>Sistema nervoso centrale</i>. Piccin, 2013</p>
5	Assessment methods	Oral examination

**Program of “FONDAMENTI DI PSICOLOGIA E MODELLI INFORMATICI”
“FOUNDATIONS OF PSYCHOLOGY AND INFORMATIC MODELS”**

This course is composed of three Modules: 1) Informatics, 2) General Psychology, 3) Developmental Psychology

Number of ECTS credits: 10 (workload is 250 hours; 1 credit = 25 hours)

D4232, Compulsory

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 1st year, 1st semester

1) INFORMATICS (4 ECTS)

Teacher: Pierpaolo VITTORINI

1	Course objectives	The objective of the course is to introduce learners to the basics of health informatics.
2	Dublin descriptors	<p>Course content:</p> <ul style="list-style-type: none"> - Coding systems in computer science and medicine - Introduction to algorithms and examples in computational epidemiology - Computer architectures and operating systems - Introduction to imaging - Networking Internet, telemedicine and PubMed <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have knowledge and understanding of basics of health informatics o explain coding systems in computer science and medicine o demonstrate skill in using medical computer resources o demonstrate capacity for reading and understand other texts on related topics.
3	Prerequisites and learning activities	No prerequisites
4	Teaching methods and language	Lectures, team work, exercises, home work Language: Italian Ref. Text book: -Vittorini P. <i>L'informatica per la medicina e la sanità pubblica</i> . Edizioni L'Una. 2009.
5	Assessment methods and criteria	Written exam

2) GENERAL PSYCHOLOGY (3 ECTS)

Teacher: Domenico PASSAFIUME

1	Course objectives and Learning outcomes	The goal of the course is to provide the knowledge of the fundamental principles of psychology. On successful completion of this course, the student should understand the fundamental concepts of Psychology, and should be aware of mental functions and behaviors of individuals and groups.
2	Dublin descriptors	<p>Topics of the module include:</p> <p><u>Psychology and science:</u> Methods: observation, experiment, single case examination <u>Instruments:</u> check list, inventory, test <u>Theory and School:</u> psychophysiological Psychology, Psychoanalysis, S-R, Gestalt, Cognitive Psychology <u>Brain and Behavior:</u> Central Nervous System, brain functions, hemispheric differentiation, cortical areas <u>Cognitive abilities:</u> learning, memory, language, attention, space perception, emotion <u>Cognitive Deficit:</u> aphasia, apraxia, amnesia, agnosia, visuospatial disorders, attention deficit, neglect</p> <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have good knowledge of basic methods in Psychology, o have knowledge and understanding of the role of mental functions in individual and social behavior, o understand and explain the meaning of individuals and groups behaviors, o understand the fundamental concepts of physiological and biological processes that underlie cognitive functions and behaviors, o demonstrate skill in behavior observation, o demonstrate capacity for reading and understand other texts on related topics.
3	Prerequisites and learning activities	No prerequisites
4	Teaching methods	Lectures, team work, exercises, home work

	and language	Language: Italian Ref. Text book: -Gray P. <i>Psicologia</i> , Zanichelli, Bologna 2012 (or any manual of Psychology)
5	Assessment methods	Written exam
3) DEVELOPMENTAL PSYCHOLOGY (3 ECTS)		
Teacher: Dina DI GIACOMO		
1	Course objectives and Learning outcomes	This course provides students with a basic grounding in developmental psychology from birth through adolescence. Several theoretical approaches to psychology are introduced and the development of psychology as a science is discussed and analyzed. Examples of topics that may be covered include: communication in infancy; attachment; temperament; theories of cognitive development; social cognition; gender development; adolescent development; language development.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Theoretical Bases of Development: the qualitative and quantitative methods , - Issues and theories in Developmental Psychology: Experiments, - The central nervous system, - Developmental research methodology. - Theories of Cognitive Development, - Language development: debates and issues, - Developmental Issues: Development of motor ability, kinaesthesia and haptic perception, the effects of early experience on development, - Social-emotional Development, - Educational applications. <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o acquire knowledge of theoretical Bases of Development, o demonstrate knowledge and understanding of Theories of Cognitive Development, o be able to explain the main developmental issues: development of motor ability, kinaesthesia and haptic perception, o be able to describe the effects of early experience on development, development of response inhibition and executive function, social-emotional development, o be able to describe and evaluate the major issues and controversies that distinguish various theoretical approaches to Developmental Psychology Theory, o be able to conduct and interpret statistical analyses, o develop the ability to design and conduct basic studies to address psychological questions, o be able to evaluate the quality of information, including differentiating empirical evidence from speculation, o be able to evaluate issues and behaviour using different theoretical and methodological approaches, o be able to use reasoning and evidence to recognise, develop, defend, and criticise arguments o be able to give examples and explain the difference between continuous and discrete models of development.
3	Prerequisites and learning activities	No prerequisites
4	Teaching methods and language	Lectures, team work, exercises Language: Italian Ref. Text book: - Anolli L., Legrenzi P., <i>Psicologia generale</i> , Il Mulino Editore, 2009.
5	Assessment methods and criteria	Written and oral exam

**Programme of "TECNICHE DI RADIOPROTEZIONE"
"RADIOPROTECTION TECHNIQUES"**

Number of ECTS credits: 3 (workload is 75 hours; 1 credit = 25 hours)

D4233, Compulsory

1st Cycle Degree in PSYCHIATRIC REHABILITATION TECHNIQUE, 2nd year, 1st semester

1) RADIATION PROTECTION		
Teacher: Carlo MASCIOCCHI		
1	Course objectives and Learning outcomes	The objectives of the course is to provide the students with medical information about the use of ionizing and non-ionizing radiation and methods to protect from them, according to the actual Italian law.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - principles of physics of ionizing radiations - biological effects due to interaction with living matter - radiation effects - exposure of population to ionizing radiation - sources of ionizing radiation in radiological practice and principles of image production measures of ionizing radiation - principle of radiation protection - Italian directive on radiation protection of workers and population - health protection of individuals against the dangers of ionizing radiation in relation to medical exposure - general principles of protection in relation to practices with employment of radiological equipment <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have knowledge and understanding of ionizing and non-ionizing radiation; o understand and explain the rules of radiation protection; o be able to apply appropriate protection measures in the professional life; o have capacity to assess and evaluate the risks related to their profession.
3	Prerequisites and learning activities	None.
4	Teaching methods and language	Lectures. Language: Italian, English Ref. Text book: -Di Cesare E, Gallicchi P, Midiri M. <i>La Radioprotezione in Radiologia</i> . Casa Editrice Idelson-Gnocchi, 2010
5	Assessment methods and criteria	Written test

Programme of "MEDICINA SOCIALE" "SOCIAL MEDICINE"		
This course is composed of two Modules: 1) First aid Techniques, 2) General Hygiene		
Number of ECTS credits: 6 (workload is 150 hours; 1 credit = 25 hours)		
D3680, Compulsory		
1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 1st year, 2nd semester		
1) FIRST AID TECHNIQUES (3 ECTS)		
Teacher: V. R. IULIANELLA		
1	Course objectives	The goal of this course is ensure that students acquire and retain skill and knowledge that will enable them to act correctly in cardiac and respiratory emergencies.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - First Aid: aims and organization - 118 organization in Italy - First Aid Activity - Emergency Department organization -Triage - Altered state of consciousness - Trauma - Shock - Altered state of breath - Altered state cardiocirculatory - Vital parameters monitoring - Venous access

		<ul style="list-style-type: none"> - Mask ventilation - Endotracheal Intubation - Upper airway obstruction - Basic Life Support (BLS) <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have knowledge of cardiac, respiratory physiopathology, cerebral blood flow physiopathology, head trauma physiopathology; o have knowledge of pharmacology principles; o have knowledge of Emergency Department organization; o understand finally the entity, severity, priority of the emergency; o demonstrate skills in noninvasive airway management and ability to perform chest compression, and to use AED
3	Prerequisites and learning activities	The students must know some principles of Anatomy, Cardiovascular and Respiratory Physiology and Pharmacology
4	Teaching methods and language	Lectures and practice in BLS Language: Italian Ref. Text books: Teacher's notes
5	Assessment methods and criteria	Written exam. Optional further oral questions, on the most important issues, to improve evaluation.
2) GENERAL HYGIENE (3 ECTS)		
Teacher: Stefano NECOZIONE		
1	Course objectives and Learning outcomes	Aim of this course is to provide the students with knowledge and capacity to understand the basic methodology and tools for the prevention of infectious and non infectious diseases in hospital and non-hospital setting. Among the competences acquired, students will be able to develop self-analysis of certain health risk factors and prevention strategies both at individual and collective level, and to plan interventions for health and safety promotion of health care workers and users.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> -Concepts of Health and Illness and Aetiology of Illness -Principles and Practice of Health Promotion -Epidemiology: general aspects. epidemiology measures, types of Epidemiologic Study -Aims and methods of prevention: primary prevention, secondary prevention (screening), tertiary prevention and rehabilitation -General prophylaxis for infectious diseases; hospital hygiene; Hospital infections. -General prevention of non infectious diseases <p>By the end of the course the student</p> <ul style="list-style-type: none"> o has acquired knowledge of the determinant factors of health and disease; o knows the fundamental means to prevent the main infectious and non-infectious diseases; o is able to design a prevention strategy; o is able to apply and use the acquired knowledge; o understand scientific publication and is able to up-date his methods.
3	Prerequisites and learning activities	No prerequisites are needed
4	Teaching methods and language	Lectures, team work, exercises, home work, reports. Language: Italian Ref. Text books: -Barbuti S, Bellelli E, Fara G.M., Giammanco G. <i>"Igiene"</i> , Monduzzi Ed., 2011.
5	Assessment methods and criteria	Written and oral exam

Programme of "ECONOMIA AZIENDALE E DIRITTO"
"BUSINESS ECONOMICS AND LAW"

This course is composed of two Modules: 1) Company Economics, 2) Company Organisation

D2748, Compulsory

2nd Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 1st year, 2nd semester

Number of ECTS credits: 6 (workload is 150 hours; 1 credit = 25hours)		
1) BUSINESS ECONOMICS (3 ECTS)		
Teacher: Lorena LATTANZI		
1	Course objectives	Aims of this Module is to provide the students with knowledge and skills enabling them to apply economic models to healthcare demand and supply, and to their interaction in the healthcare economy. They will acquire innovative thinking related to the business, management and policy of health care services, health care technology, and health care financing.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the Course include:</p> <ul style="list-style-type: none"> - Organization and management in health care organizations, - The departmentalization in health care organizations, - Economic measures in the public health-care and Communication strategies, - The process of "corporatization" of the national health system and the impact on information systems, The corporate strategies, - The system of general and analytical accounting. - The balance sheet in health care organizations: function and patterns of preparation - The budget in health care organization. - The financing system and the logic programming in health, <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o have profound knowledge of the Italian Healthcare system; o have knowledge and understanding of the concepts, institutions, and issues specifically involved in the organization, financing and delivery of health services and products; o be able to explain the structure of health care systems in Europe, focusing on financing, reimbursement, delivery systems and adoption of new technologies; o demonstrate ability to critically examine the relative roles of private sector and public sector insurance and providers, and the effect of system design on cost, quality, efficiency and equity of medical services, o be able to apply economics to an analysis of the health care industry, o develop generalized skills in competitive analysis and the ability to apply those skills in the specialized analysis of opportunities in producer (e.g. biopharmaceutical, medical product, information technology) and provider (e.g. hospitals, nursing homes, physician) organizations and industry sectors, o acquire skills for critical and analytical thought about the national health care system and its organization, o be able to explore the effects of the changing health care environment on the physician, patient and health care manager.
3	Prerequisites and learning activities	No specific prerequisites are needed.
4	Teaching methods and language	Lectures, group and individual activities: assigned tasks, reports, projects and oral presentations Language: Italian Ref. Text books: - Normann, R., <i>La Gestione strategica dei servizi</i> , Milan: Etas. (1992) -Teacher's Notes and further teaching material will be distributed by the teachers.
5	Assessment methods and criteria	Oral exam.
2) LABOR LAW (3 ECTS)		
Teacher: F. CAROCCIA		
1	Course objectives	This course introduces students to the basic elements and principles of private law. It begins by looking at what the term private law means, the sources of private law and how the different areas of private law - especially property, contract, tort and unjust enrichment – relate to each other. This course aims to enable the students to understand the basic concepts and relevance of private law norms and to critically analyse the concepts of jurisdiction and connecting factors and areas of substantive Italian and international private law.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Law and law system. The Italian law system. - Sources of law. Methods of resolution of conflict of law. - Law and jurisprudence. - The Italian civil code: Private law, values and corrective justice - Private Law and public law distinguished

		<ul style="list-style-type: none"> - Persons and legal persons: definition, distinction. - Birth, death. Legal capacity and its limits. - Right to health. - Definition. Sources of obligations. - Liability. - Tort law. - Damages. <p>On completion of this module, students are expected to be able to:</p> <ul style="list-style-type: none"> o Understand the basic principles and sources of private law, with a focus on contract law, property law, agency and equitable estoppel. o Apply these principles to hypothetical fact scenarios. o Demonstrate an awareness of the place of private law within the general landscape of Italian law, including the role of principles of justice in the development of legal rules. o Examine the principles of private law critically in light of practical problems in the operation of the law, both alone and in co-operation with others. o Demonstrate effective oral communication skills by discussing and debating course concepts in a scholarly, reflective and respectful manner. o Explain the concept and apply the content of the main areas of private law. o Critically evaluate the Key substantive legal subjects of private law.
3	Prerequisites and learning activities	No specific prerequisites are needed.
4	Teaching methods and language	<p>Lectures, group and individual activities: assigned tasks, reports, projects and oral presentations</p> <p>Language: Italian</p> <p>Ref. Text books:</p> <ul style="list-style-type: none"> -Teacher's Notes and further teaching material distributed by the teachers.

Programme of "METODI E TECNICHE RIABILITATIVE"
"REHABILITATION METHODS AND TECHNIQUES"

This course is composed of two Modules: 1) Neuro and Psychomotor Foundations, 2) Nursing Assistance

Number of ECTS credits: 6 (workload is 150 hours; 1 credit = 25 hours)

D3676, Compulsory

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 1st year, 2nd semester

1) NEURO AND PSYCHOMOTOR FOUNDATIONS (3 ECTS)

Teacher: P. GALEOTA

1	Course objectives	This module provides the students with an overview of the relationship between cognitive functions and neuro-motor development. The students will learn how the development of movement, coordination, and use of the motor-skill areas requires practice. This must be measured in terms of speed, precision, distance, procedures, or techniques in execution.
2	Dublin descriptors	<p>Topics of the module include:</p> <p>The seven major categories are listed from the simplest behavior to the most complex:</p> <p><u>Perception:</u> The ability to use sensory cues to guide motor activity.</p> <p><u>Set:</u> Readiness to act. It includes mental, physical, and emotional sets.</p> <p><u>Guided Response:</u> The early stages in learning a complex skill that includes imitation and trial and error (practicing).</p> <p><u>Mechanism:</u> The intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency.</p> <p><u>Complex Overt Response:</u> The skillful performance of motor acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy.</p> <p><u>Adaptation:</u> Skills are well developed and the individual can modify movement patterns to fit special requirements.</p> <p><u>Origination:</u> Creating new movement patterns to fit a particular situation or specific problem.</p> <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have knowledge and understanding of the main stages in learning psychomotor skills; o be able to apply the acquired knowledge to assess the neuro-psychomotor, cognitive and behavioural evolution of the child;

		<ul style="list-style-type: none"> o be able to make a judgment about need of rehabilitation; o demonstrate communication skills; o demonstrate capacity for reading and understanding scientific data-base on related topics.
3	Prerequisites and learning activities	Basic knowledge of psychology
4	Teaching methods and language	Lectures, team work, exercises, home work Language: Italian Ref. Text book: -Lecture notes supplied by the teacher.
5	Assessment methods and criteria	Written exam
2) NURSING ASSISTANCE (3 ECTS)		
Teacher: V. FONZO		
1	Course objectives and Learning outcomes	The goal of this course is to provide the knowledge of the organization of community-based mental health services in Italy, with particular attention to case management and team work. On successful completion of this module, the students should have the understanding of the concept of assertive community treatment and programme in assertive community treatment, in comparison with Italian community based mental health services.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Taking the patient in long care; - The organization of community-based mental health services in Italy; - Case-management, assertive community treatment, programme in assertive community treatment; - multi-professional team work (psychologists, social workers, rehabilitation technicians, psychiatrists, parents, users and general practitioner). <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have knowledge and understanding of the organization of the psychiatric care with particular attention to case-management, assertive community treatment, program in assertive community treatment; o apply the knowledge to deliver the integrated assertive care in bipolar overall in patients with serious mental problems and small social network and low social economic situation; o make a judgment on the use of assertive community treatment that needs many economical funds and large resource of professional and volunteers; o demonstrate skill to communicate in simple way the different economic or psychopathological problems to multi professional workers; o demonstrate capacity for reading and understand other texts and consult scientific data-base on related topics.
3	Prerequisites and learning activities	Basic knowledge of social psychology
4	Teaching methods and language	Lectures Language: Italian Ref. Text book: Burns T., Firn M., <i>La presa in carico intensive sul territorio. Un manuale per gli operatori di salute mentale</i> . Edizione italiana a cura di Fioriti A., Bassi M. Il Pensiero Scientifico Editore. Roma, 2003.
5	Assessment methods and criteria	Written exam

Programme of "NEUROSCIENZE" "NEUROSCIENCES"

This course is composed of three Modules: 1) Neurology, 2) Psychiatry, 3) Child Neuropsychiatry

Number of ECTS credits: 9 (workload is 225 hours; 1 credit = 25 hours)

D2670, Compulsory

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 2nd year, 1st semester

1) NEUROLOGY (3 ECTS)

Teacher: Simona SACCO

1	Course objectives	The main objectives of the course are as follows: <ul style="list-style-type: none"> • To provide essential knowledge of neurological diseases with respect to epidemiology, pathogenesis, and clinical picture • To provide essential knowledge of diagnostic methods and therapeutic approaches in neurological diseases
2	Dublin descriptors	Topics of the module include: <ul style="list-style-type: none"> - The neurological patient - Anatomy and physiology of the central and peripheral nervous system - The neurological examination - Major clinical syndromes - Cerebrovascular diseases - Traumatic brain injury and disorders of consciousness - Meningitis and encephalitis - Epilepsy - Movement disorders - Dementias - Amyotrophic lateral sclerosis - Muscle and neuromuscular diseases - Metabolic encephalopathies - Demyelinating diseases - Myelitis <p>On successful completion of this module the student should:</p> <ul style="list-style-type: none"> o Have knowledge of key anatomical and physiological concepts (cerebral areas and neural pathways, functional neural systems which are impaired in neurological diseases) o Have knowledge of main neurological diseases o Have knowledge of main assessment tools (laboratory and instrumental tools, clinical scales) in neurological diseases o Identify the factors which can influence the outcome of neurological diseases
3	Prerequisites and learning activities	The student has to know basic principles and notions of central and peripheral nervous systems anatomy
4	Teaching methods and language	Frontal lessons, ad hoc seminars Language: Italian, English Ref. Text Books: <ul style="list-style-type: none"> – Robert C. Collins, <i>Neurologia</i>, Edises Editore, 1999 (<i>Italian</i>) – Robert C. Collins, <i>Neurology, Saunders Text and Review Series</i>, Edition 1, Saunders 1997 Elsevier Health Sciences (<i>English</i>)
5	Assessment methods and criteria	Oral exam
2) PSYCHIATRY (3 ECTS)		
Teacher: Massimo CASACCHIA		
1	Course objectives and Learning outcomes	The goal of this course is to provide the knowledge of the organization of community-based mental health services in Italy and the main behavioral disorders that can affect the young patients with particular attention to ADHD. On successful completion of this module, the students should have the understanding of the concept of mental health, and the pathogenetic mechanism of violence and aggression. Also they should demonstrate skills to apply some simple cognitive-behavioral strategies as Rational Emotional Therapy to address dysfunctional emotions and maladaptive behaviors.
2	Dublin descriptors	Topics of the module include: <ul style="list-style-type: none"> - the organization of community-based mental health services in Italy; - introduction to some cognitive-behavioral interventions (as Rational Emotional Therapy) to as approach that addresses dysfunctional emotions, violent and aggressive behaviors; - social cognitive dysfunctions as physiopathological mechanism to explain in child and adolescent early onset of violent and aggressive behaviors; - ADHD as an example of disorder that reduce the quality of life and social function in child, adolescent and in his parents. <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have knowledge and understanding of the organization of the psychiatric care in Italian community-based services and of the main characteristics of ADHD and the physiopathological mechanisms of violent behaviors

		<ul style="list-style-type: none"> o applying and explain some cognitive behavioral interventions to reduce maladaptive behaviors and to suggest also educational approach to the family o make a judgment on the opportunity of integrated care with use of specific drugs can reduce maladaptive behaviors o demonstrate skill in communication with young patients and their caregivers and ability to refer them to appropriate care adolescent services and professionals o demonstrate capacity for reading and understand other texts and consult scientific data-base on related topics.
3	Prerequisites and learning activities	Basic knowledge of general and cognitive psychology
4	Teaching methods and language	Lectures in classroom. Language: Italian, English Ref. Text books: -American Psychiatric Association, <i>Manuale Diagnostico e Statistico dei Disturbi mentali-V</i> , 2013: Attention-Deficit/Hyperactivity Disorder -Filippo Muratori, <i>Ragazzi violenti</i> , Ed. Il Mulino, 2005
5	Assessment methods and criteria	oral exam
3) CHILD NEUROPSYCHIATRY (3 ECTS)		
Teacher: Elisabetta TOZZI		
1	Course objectives and Learning outcomes	The goal of this course is to provide the students with scientific knowledge enabling them to understand the child development peculiarities since the psycho physiological birth and to assess the possible side motor, cognitive, behavioral, affective and socio-relational alterations as well to evaluate the methods of neurological diseases evolution and of rehabilitation of some of the main forms of neurological infant and child diseases.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Maturing and development of the central nervous system; - The motor skills of the baby and its development; the reflexes of the newborn and infant equilibrium reactions; - The perinatal damage: hypoxic and ischemic encephalopathy of the term and preterm newborn; - Malformations of the CNS; - The infantile cerebral palsy: classification, clinical comorbidities and complications; - The motor and verbal dyspraxia; - The epilepsies of infants and children; - The mental retardation and mental disability; - The posture, the body image and its pathologies (vertigo, ataxia, headaches). <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o have profound knowledge of children development and neurological disease evolution; o have knowledge and understanding of functional deficits and clinical comorbidities; o demonstrate skill for a correct assessment of neurobehavioral functions of babies in healthy and pathological settings and ability to identify the neurological and mental disability; o be able to classify pyramidal and extrapyramidal damage and recognize dyspraxia and cerebral palsy; o be able to apply the charge of disability; o demonstrate capacity for reading and understanding other texts on related topics. o be able to explain the relevant techniques in diagnostics using appropriate scientific language; o be able to communicate effectively with the young patients and their parents and to work in a multidisciplinary team, showing commitment to responsibilities.
3	Prerequisites and learning activities	The student must know the basic notions of Neurology and Neuro-rehabilitation, Pediatrics.
4	Teaching methods and language	Lectures and practical exercises. Language: Italian and English Ref. Text books -Roberto Militerni <i>"Neuropsichiatria infantile"</i> , Ed. Idelson - Gnocchi, 2004 - Teacher's Notes

5	Assessment methods and criteria	Oral exam
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<p>Programme of “TECNICHE E METODI DI NEURO E PSICOMOTRICITA’ NELLE MALATTIE INFANTILI” “NEURO AND PSYCHO-MOTOR TECHNIQUES AND METHODS IN PEDIATRIC PATHOLOGIES”</p>		
<p>This course is composed of two Modules: 1) Psychomotor Techniques, 2) Pediatrics I</p>		
<p>Number of ECTS credits: 6 (workload is 150 hours; 1 credit = 25 hours)</p>		
<p>D3678, Compulsory 1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 2nd year, 1st semester</p>		
<p>1) PSYCHOMOTOR TECHNIQUES (3 ECTS)</p>		
<p>Teacher: Maria Paola COLATEI</p>		
1	Course objectives and Learning outcomes	<p>The objectives of the course are to provide the students with the knowledge and tools to carry out a proper assessment of neuro-motor and neuro-psychological skills of patients with different developmental disorders, to draw up specific projects and programs rehabilitation on the basis of neuropsychological development plan and to understand the concept and importance of "rehabilitation team" and the specific role of the multidisciplinary team.</p>
2	Dublin descriptors	<p>The course includes topics such as:</p> <ul style="list-style-type: none"> - the shape, role and principles of the therapist neuro and psychomotor developmental age, - the concept of development and the approaches and intervention of the therapist neuro and psychomotor developmental age, - the nosology of disorders of developmental (ICD-10, DSM-IV, DSM-V, The Classification 0-3) and comorbidity between developmental disorders and psychopathological disorders in children and adolescents, - neuro-psychomotor and neuropsychological assessment in childhood, - tools (test) for neuropsychological assessment in childhood, - motor- praxis development and communicative-linguistic (phonology, semantics, syntax and pragmatics) of the child, - the importance of harmonious development, synchronous and integrated in different areas, - processing profile of neuropsychological development not only for making the diagnosis of development, but also for the identification of strengths and skills in the emergency phase of the child - the drafting of the action plan - the importance of teamwork in childhood and involvement in the intervention rehabilitation of both family and school. <p>The successful students will</p> <ul style="list-style-type: none"> o acquire knowledge of psychomotor techniques in education and re-education, dealing with different expression techniques and, more specifically, with bodily expression, o Be able to define psychomotor skills, o Be able to explain the relationship between cognitive and affective objectives to psychomotor objectives, o acquire a global vision of the human body, o be able to detect, prevent and treat possible complications in infants, taking a systemic, holistic and inclusive approach, o be able to work on communication from different perspectives such as speech, gesture and body position, o be able to receive the messages transmitted by others and work in team.
3	Prerequisites and learning activities	<p>The student should have knowledge about what prerequisites: anatomy, neurophysiology, neurology, kinesiology and developmental psychology.</p>
4	Teaching methods and language	<p>Lectures, team work, home work Language: Italian Ref. Text books:</p> <ul style="list-style-type: none"> - Mary D. Sheridan – Raffaello <i>“Dalla nascita ai cinque anni. Le tappe fondamentali dello sviluppo”</i>, Raffaello Cortina Editore, 2009.

		<ul style="list-style-type: none"> - Lisa A. Kurtz, "<i>Disturbi della coordinazione motoria. Come aiutare i bambini goffi a casa e a scuola</i>" – Erickson, 2006. - Loredana Lucarelli, Prancesca Piperno, Martina Balbo, "<i>Metodi e Strumenti di Valutazione in Psicopatologia dello Sviluppo</i>", Raffaello Cortina Editore, 2008. - Enrica Mariani, Luigi Marotta, Manuela Pieretti, "<i>Presa in carico e intervento nei disturbi dello sviluppo</i>", Erickson, 2009. - <i>Scientific articles</i>
5	Assessment methods and criteria	Oral examination
2) PEDIATRICS I (3 ECTS)		
Teacher: Giovanni NIGRO		
1	Course objectives and Learning outcomes	The goal of this Module is to provide educational experiences in the diversified field of Pediatrics in an intellectual environment conducive to learning the exemplary practice of Pediatrics. This is accomplished by providing an organized, progressive educational experience with increasing patient care responsibilities. The course is organized in such a way to have an appropriate balance between structured educational activities including didactic lectures and clinical learning and patient care responsibilities.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Approaches and techniques to successfully facilitate prehospital pediatric assessment: <u>Air Ways</u> (Ventilatory rate, pattern, and depth (if abnormal), Any signs of impaired airway / respiratory distress and / or impaired gas exchange, Integrity of oxygen delivery system, Airway compliance if being manually ventilated, Adventitious breath sounds), <u>Circulation</u> (central pulse, peripheral pulse, skin color, temperature), <u>Neurological assessment</u> (General mental status, level of alertness and activity, Pupils, Motor and sensory changes, Continued spinal immobilization with trauma patients) - Variances in children at various stages of development and general age-specific assessment skills that address the unique aspects and needs of each child at different stages. - Parameters that will assist the paramedic to identify the most appropriate treatment plan. <p>The successful student will be able to:</p> <ul style="list-style-type: none"> o Identify basic anatomical and physiological differences between adult and pediatric patients and considerations in the prehospital setting, o Describe and demonstrate the general approaches to completing a thorough pediatric assessment in the prehospital setting, o Describe the clinical significance of abnormal assessment findings in pediatric patients, o Describe the strategies for assessing children of different ages and at various developmental stages, o Identify characteristics of pediatric patients seen in prehospital emergency settings, o Describe how pediatric developmental stages affect a child's reaction to illness, injury and pain, o Provide examples of specific emergency care interventions for a pediatric patient based on various developmental stages.
3	Prerequisites and learning activities	Basic knowledge of neuroanatomy and physiology.
4	Teaching methods and language	Lectures in classroom. Language: Italian, English Ref. Text books: - Teacher's Notes
5	Assessment methods and criteria	Oral exam.

**Programme of "RIEDUCAZIONE E RIABILITAZIONE COGNITIVA"
"COGNITIVE REHABILITATION AND RE-EDUCATION"**

This course is composed of two Modules:

1) Clinical Psychology, 2) Rehabilitation of the developmental Psychopathologies I

Number of ECTS credits: 6 (workload is 150 hours; 1 credit = 25 hours)

D2656, Compulsory

1 st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 2 nd year, 1 st semester		
1) CLINICAL PSYCHOLOGY (3 ECTS)		
Teacher: Domenico PASSAFIUME		
1	Course objectives and Learning outcomes	The goal of the course is to provide the basic knowledge of brain functions and main techniques in Psychology for better identify and address the patients that need occupational therapy. On successful completion of this course, the student should understand the fundamental concepts of Psychology, and should be aware of the potential disturbances on cognitive, behavior and emotion domain which he may face during his work.
2	Dublin descriptors	<p>Topics of the module include: <u>Psychology and science:</u> Methods: observation, experiment, single case examination. <u>Instruments:</u> check list, inventory, test. <u>Theory and School:</u> Psycho-physiological Psychology, Psychoanalysis, S-R, Gestalt, Cognitive Psychology; <u>Brain and Behavior:</u> Central Nervous System, brain functions, hemispheric differentiation, cortical areas. <u>Cognitive abilities:</u> learning, memory, language, attention, space perception, emotion <u>Cognitive Deficit:</u> aphasia, apraxia, amnesia, agnosia, visuospatial disorders, attention deficit, neglect.</p> <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have good knowledge of basic techniques in Psychology o have knowledge and understanding of the consequence of organic or functional brain disease o understand and explain the meaning of complex behavior o understand the fundamental concepts of brain – behavior relations o demonstrate skill in behavior observation, ability to conceive a response to inappropriate behaviour. o demonstrate capacity for reading and understand other texts on related topics.
3	Prerequisites and learning activities	No specific prerequisites are needed
4	Teaching methods and language	Lectures and exercises. Language: Italian Suggested Text books: P. Gray, <i>Psicologia</i> , Zanichelli, Bologna 2012 (or any manual of Psychology)
5	Assessment methods and criteria	Written exam.
2) REHABILITATION OF DEVELOPMENTAL PSYCHPATHOLOGIES I (3 ECTS credits)		
Teacher: Anna MARIMPIETRI		
1	Course objectives and Learning outcomes	The goal of this course is to provide the students with the knowledge of the main developmental psychopathologies and the skills for understanding childhood disturbances effectively, by discovering what forces can divert development from its usual course and what can encourage a return to normality.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Definition and classification of Mental Retardation. - Etiologies: Prenatal Intoxications, Trauma or Physical Agents, Metabolism or Nutrition, Gross Brain Disease, Chromosomal Abnormalities, Gestational Disorders, Psychiatric Disorders - Cerebral Palsy - the main techniques for rehabilitation. <p>The successful candidate will be able to:</p> <ul style="list-style-type: none"> o Identify the accepted definition for cerebral palsy. o Match each of the five types of cerebral palsy with their appropriate rehabilitation methods. o Identify treatments used for the movement disorders of cerebral palsy. o Identify the incidence or occurrence of developmental disabilities in the United States. o Match the estimated level of retardation with the expected level of adaptive behavior for a given age group. o Match intelligence quotients to levels of adaptive behavior.
3	Prerequisites and learning activities	Basic knowledge of physiology.
4	Teaching methods	Lectures in classroom.

	and language	Language: Italian Ref. Text books: -Teacher's Notes
5	Assessment methods	Written and oral exams

<p>Programme of “RIABILITAZIONE DELLA NEURO E PSICOPATOLOGIA” " REHABILITATION in NEURO AND PSYCHPATHOLOGICAL DISABILITIES":</p> <p>This course is composed of three Modules: 1) Neuromotor Rehabilitation, 2) Psychopathology and psychiatric Rehabilitation, 3) Rehabilitation of Developmental Psychopathologies II</p>		
<p>Number of ECTS credits: 9 (workload is 225 hours; 1 credit = 25 hours)</p>		
<p>D4173, Compulsory 1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 2nd year, 2nd semester</p>		
<p>1) NEUROMOTOR REHABILITATION (3 ECTS)</p>		
<p>Teacher: Irene CIANCARELLI</p>		
1	Course objectives and Learning outcomes	<p>The course aim is to provide knowledge and tools for carrying out a correct evaluation of patients and plan a suitable recovery programme. The student will gain</p> <ul style="list-style-type: none"> - capacities to understand the concept and the importance of the “rehabilitative team” and specific role of physiotherapists inside a multidisciplinary team; - ability to plan specific projects and programs for the most important and frequent neurological diseases by applying the theoretical concepts to specific and concrete pathological situations.
2	Dublin descriptors	<p>Topics of the module include: <u>-General physiotherapy methodology:</u> Definition of rehabilitation and of the rehabilitative team: the role of physiotherapist, the International Classification of functioning, disability and health (ICF), the International Classification of Impairment, Disabilities, and Handicap (ICIDH), the organization and the planning of the rehabilitative project and programme, the definition of rehabilitative prognosis and outcomes, acquisition of creative problem solving skills and of ability to motivate patients and caregiver ;</p> <p><u>-Neuromotor evaluation:</u> Main evaluation scales of neurological deficits and disability, Evaluation of muscle tone and strength, sensitivity, balance, coordination, and gait; Central and peripheral paralysis;</p> <p><u>-Rehabilitative programme:</u> in patients bedridden, with acute and chronic stroke, multiple sclerosis, Parkinson disease, polyneuropathy .</p> <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have profound knowledge of physiotherapy theory and methods and ability to apply this knowledge in professional practice; of scientific theories and methods including literature and information searches, documentation and quality development; o have knowledge and understanding of methodology and practical experience for contributing constructively to resolving physiotherapeutic issues of different areas of physiotherapy practice; o illustrate and summarize rehabilitative programs of fundamental neurological diseases and disabilities; o understand the principles contained in ICF and in ICIDH; o demonstrate skill in analyzing, assessing, and evaluating problems with movements and functioning as well as the patient's capacities and resources to take suitable decisions and ability to identify realistic goals of physiotherapeutic intervention and plan well tailored rehabilitative programme in accordance with patient's life and expectations; o demonstrate capacity for communicate with patients, relatives, caregivers, and other professional figures in multidisciplinary collaboration.
3	Prerequisites and learning activities	<p>The student must know basics of anatomy, kinesiology, neurology semeiotic and diseases.</p>
4	Teaching methods and language	<p>Lectures, team work, home work Language: Italian Ref. Text books: -R. Greenwood, M.P. Barnes, T.M. McMillan, C.D. Ward. <i>Riabilitazione delle malattie neurologiche</i>, UTET, 1998. -N. Basaglia <i>Progettare la riabilitazione</i>, Edi Ermes, 2002.</p>

5	Assessment methods and criteria	Oral exam.
2) PSYCHOPATHOLOGY AND PSYCHIATRIC REHABILITATION (3 ECTS)		
Teacher: Rita RONCONE		
1	Course objectives and Learning outcomes	The goal of this course is to provide the knowledge of the fundamental principles of psychiatric rehabilitation, as the process of restoration of community functioning and well-being of an individual diagnosed with a mental disorder and who may be considered to have a psychiatric disability. On successful completion of this module, the students should have the understanding of the concept of functional psychiatric disability, and psychiatric rehabilitation. Also they should demonstrate the skills to assess and monitor the level of functioning and to define the personal rehabilitation goals of the users.
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - The International Classification of Functioning, Disability and Health, ICF, a classification of health and health-related domains. - The concept of psychiatric rehabilitation: definition according to the Boston's School (Anthony & Farkas) and later definitions. - Characteristics of the main models of psychiatric rehabilitation models: family psychoeducational treatments, social skill training, vocational rehabilitation. - The VADO manual: assessment of level of functioning and current social skills and definition of personal rehabilitation goals - The social stigma, self-stigma and "courtesy" stigma - Rehabilitation as an opportunity toward the personal recovery of mental illness <p>On successful completion of this module, the student should:</p> <ul style="list-style-type: none"> o have knowledge and understanding of the fundamental principles of psychiatric rehabilitation and of reduced social functioning caused by mental disorders o understand and explain the importance of individual assessment and monitoring of psychiatric rehabilitation interventions o make a judgment on the environmental factors as fundamental to functioning and disability o demonstrate skill in application of assessment and monitoring of level of functioning and definition of rehabilitation goals o demonstrate capacity for reading and understand other texts and consult scientific data-base on related topics.
3	Prerequisites and learning activities	Basic knowledge of general and social psychology
4	Teaching methods and language	<p>Lectures, team work, exercises, home work</p> <p>Language: Italian</p> <p>Ref. Text book:</p> <ul style="list-style-type: none"> - Andrews G., Hunt C., Jarry M., Morosini P., Roncone R., <i>Competenze di Base in Salute Mentale</i>. Centro Scientifico Editore, Torino, 2004. - Casacchia M., Pioli R., Rossi G. <i>Schizofrenia e cittadinanza. Manuale operativo per la riduzione dello stigma e della discriminazione</i>. Il Pensiero Scientifico, Roma, 2001 - Liberman R. <i>Il recovery dalla disabilità. Manuale di Riabilitazione Psichiatrica</i>. Giovanni Fioritti Editore, Roma, 2012 - Morosini et al. <i>Valutazione Abilità, Definizione Obiettivi, VADO</i>, Erickson Editore, Trento, 1988 - Lecture ICF notes supplied by the teacher.
5	Assessment methods and criteria	Written exam
3) REHABILITATION OF DEVELOPMENTAL PASYCHOPATHOLOGIES II (3 ECTS)		
Teacher: Enzo SECHI		
1	Course objectives and Learning outcomes	The goal of this course is to provide the knowledge of the link between developmental psychopathology and rehabilitation in developmental age. Otherwise the students have to understand the need of peculiar psychopathology in children with intellectual disabilities and other neurocognitive disorders and they have to link to the rehabilitation programs in children and adolescent. Furthermore they should demonstrate skills to apply some simple neuropsychomotor and neurolinguistic programs in order to increase cognitive strategies in developmental disorders
2	Dublin descriptors	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Developmental Specific Disorders. - Neurocognitive functions learning in childhood

		<ul style="list-style-type: none"> - Specific language and communicative disorders - Specific learning disorders - Intellectual Disabilities - Pervasive disorders and autism - The comorbidity of specific developmental disorders and the psychopathological disorders - Rehabilitation and psychosocial intervention in children with psychopathological disorders. <p>On successful completion of this module the student should:</p> <ul style="list-style-type: none"> o have knowledge of the organization of neuro- cognitive profiles in children with specific disorders. o make a selection on different rehabilitative program, o make an evaluation on the opportunity of integrated care of rehabilitation, psychological supply and paedagogical, and psychosocial intervention, o demonstrate skill in communication with young patients and their caregivers, o demonstrate capacity for reading and understanding other texts and consult scientific data-base on related topics
3	Prerequisites and learning activities	Basic knowledge of general and developmental psychology, Basic knowledge of child and adolescent neuropsychiatry.
4	Teaching methods and language	Lectures in classroom, clinical reports, clinical groups Language: Italian Ref. Text books: - <i>Diagnostic and Statistical Manual of mental disorders</i> (DSM5), APA 2013 V.Guidetti (ed.) - <i>Fondamenti di neuropsichiatria dell'infanzia e dell'Adolescenza</i> , Il Mulino Bologna 2005 -M.M. Formica <i>Trattato di neurologia riabilitativa</i> , Cuzzolin editore, Napoli 2003
5	Assessment methods and criteria	Oral exam and intermediate interviews.

Programme of "SCIENZE MEDICHE" "MEDICAL SCIENCES"		
This course is composed by 4 Modules: 1) Physical Medicine and Rehabilitation, 2) Diseases of locomotor apparatus, 3) Pediatrics II, 4) Child Neuropsychiatry II		
D4104, Compulsory 1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 2nd year, 1st semester		
Number of ECTS credits: 10 (total workload:250 hours, 1 credit =25 hours)		
1) PHYSICAL MEDICINE AND REHABILITATION (3 ECTS)		
Teacher: Angelo CACCHIO		
1	Course objectives	The goal of this course is to provide the students with knowledge of rehabilitation methods that allow functional recovery in musculoskeletal disorders, neurological, sports injuries, degenerative diseases and their outcomes. Rehabilitation for various EBM and the main treatment in the light of EBM will be highlighted.
2	Course content and Learning outcomes (Dublin descriptors)	Topics of the module include: <ul style="list-style-type: none"> - Rehabilitation of the upper limb (shoulder, elbow, wrist); - Rehabilitation of the lower limb (hip, knee, ankle); -Rehabilitation of the vertebral column (cervical, thoracic, lumbar, sacral, coccygeal) - Rehabilitation of spine dimorphisms - Anatomical and functional mechanisms of post-lesion restructuring of nervous system (Rehabilitation of peripheral nervous system lesions, of spinal cord lesions, of traumatic brain injuries). <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o have profound knowledge of the main spine lesions and dimorphisms; o have knowledge and understanding of the goals of rehabilitation for various diseases and of the main treatment methodologies and techniques for functional recovery; o be able to explain the relevant techniques and tools for the assessment of a patient using appropriate scientific language; o demonstrate ability to identify the targeted treatment and to assess the results; o be able to apply the acquired knowledge to concrete cases as occurring in the professional

		<p>life;</p> <ul style="list-style-type: none"> o demonstrate concern to health, well-being and safety; o be able to communicate effectively with the patients and their caregivers; o demonstrate capacity for reading and understanding other texts on related topics and to be critical and self-critical.
3	Prerequisites and learning activities	The student must know anatomy, physiology and pathology about musculoskeletal system.
4	Teaching methods and language	<p>Lectures; team work; tutorials.</p> <p>Language: Italian</p> <p>Ref. Text books:</p> <ul style="list-style-type: none"> - Randall L. Braddom, "<i>Physical Medicine and Rehabilitation</i>", Ed A. Delfino, 2011. - N. Basaglia, "<i>Trattato di Medicina Riabilitativa</i>", Ed. Idelson Gnocchi, 2009. - W. E. Prentice, "<i>Rehabilitation Techniques in Sports Medicine</i>", UTET, 1999.
5	Assessment methods and criteria	Oral exam.

2) DISEASES OF LOCOMOTOR APPARATUS (3 ECTS)

Teacher: Vittorio CALVISI		
1	Course objectives	<p>The module provides the students with the knowledge of the musculoskeletal system and of its main disorders due to both chronic and traumatic diseases and to surgical intervention. The aim is to enable the students to understand the locomotor system, the main surgical and nonsurgical means to treat musculoskeletal trauma, sports injuries, degenerative diseases, infections, tumors, and congenital disorders in order to identify, plan and apply the relevant rehabilitation techniques.</p>
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Introduction to musculoskeletal system structure, body alignment, biomechanics, - Bone diseases and disorders, - Chronic arthropathies - Traumatic musculoskeletal disease - Main surgical treatments and appropriate rehabilitation treatments designed to facilitate the process of recovery from injury to as normal a condition as possible. <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have acquired knowledge of the musculoskeletal system: anatomy and biomechanics; o know and understand the systemic diseases affecting the musculoskeletal system; o know and explain sports injuries & related surgery; o be able to make a musculoskeletal system examinations; o have capacity to use the knowledge acquired to the rehabilitation practice.
3	Prerequisites and learning activities	The student must know: anatomy, physiology, physics
4	Teaching methods and language	<p>Lectures and study at home</p> <p>Language: Italian</p> <p>Ref. Text Book:</p> <ul style="list-style-type: none"> - Mancini Morlacchi "<i>Clinica ortopedica manuale: atlante</i>", Piccin ed., 2011
5	Assessment methods and criteria	Oral exam and practical test.

3) PEDIATRICS II (3 ECTS)

Teacher: Giovanni FARELLO		
1	Course objectives	The goal of this course is to provide the knowledge of the main health problems of child patients.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <p>Physiological and pathological growth and development of the child. Infant nutrition: breast and artificial feeding, weaning, jaundice, nutrition in the second year of life. Perinatal suffering and neonatal asphyxia and care; hyaline membrane disease. Gastro enteric tract diseases: Celiac Disease; Vomiting; Acute and chronic diarrhoea; Cystic Fibrosis; Food allergies. Respiratory diseases: diseases of the upper airways. Bronchiolitis; Pneumonia. Cardiovascular diseases: Major congenital heart disease; Acquired heart disease. Rheumatic disease. Urinary tract diseases: Glomerulonephritis; Nephritic and Nephrotic syndromes; Urinary tract infections. Nervous system diseases: febrile seizures; Cerebral palsy. Infectious disease: Major viral and bacterial infections.</p>

		<p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o know and understand the fundamentals of Paediatrics and neonatology. o Apply knowledge and understanding in the recognition of the main problems in the care of child patients, o be able to implement nursing care planning starting from the newborn and child patient diagnosis, o Describe general approaches to interviewing, history taking and assessing pediatric patients at various developmental stages, o Describe general approaches to assessing and managing: A stable child, A sick child, A child with special needs, o Provide examples for preparing a child and their families for emergency treatments and procedures, o Provide examples of age-appropriate distraction and coping techniques for pediatric patients at various developmental stages, o be able to explain to the little patients, their parents and to other professionals the signs and symptoms of the main physiological and pathological clinical patterns in newborns and children. o be able to assess the own knowledge needs and then to guide own future learning in these topics
3	Prerequisites and learning activities	The student must have the basis of human physiology and anatomy.
4	Teaching methods and language	Lectures. Language: Italian Ref. Text books: Notes of the teacher
5	Assessment methods and criteria	Written and oral exam, short report.
4) CHILD PSYCHIATRY II (1 ECTS)		
Teacher: Maria Pia LEGGE		
1	Course objectives	This Module provides the framework to train Consultant Child and Adolescent Psychiatrists users and carers. The Module goal is to identify the brain networks underlying cognitive, motor, emotional and mental health status in children and adolescents with neurodevelopmental disorders or brain injury/disease. This enables a better understanding of the process of recovery and reorganisation of function that lessens the burden of impairments. Our research findings directly translate into improved clinical care and more favourable educational outcomes.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of this Module include:</p> <ul style="list-style-type: none"> - Neurodevelopment, neuroanatomy and physiology and normal child development - Learning Disability, neurodevelopmental disorders, progressive neurological disorders and acquired brain injury – Aetiological overview - Genetics of Child & Adolescent Psychiatry - Theory and Practice of ASD - Epilepsy, speech and language impairments or specific learning difficulties - Tic disorder, Tourette syndrome, OCD, ADHD o Major risk factors for abuse e.g. substance misuse, adult mental illness, domestic violence, adult personality disorders, o Effects of neglect, abuse and domestic violence on children and adolescents, o Key legislation/guidance regarding safeguarding e.g. the UN Convention of the Rights of the Child, the Human Rights Act and child relevant legislation, o Dysfunctional patterns of family and parental behaviour that may raise concerns of coercion, exploitation of power and secrecy. <p>The successful student will</p> <ul style="list-style-type: none"> o develop an understanding of normal neuronal development, both physiology and anatomy, through to adulthood and the aetiological factors which may play a part in the process, o Know and understand aetiological and neurophysiological processes behind the common presentations in neurodevelopmental disorders, acquired brain injury and learning disability, o discuss the recent developments in genetics within Child and Adolescent psychiatry and

		<p>highlight how gene environment interactions are influencing our understanding of some common neuropsychiatric disorders in childhood,</p> <ul style="list-style-type: none"> o explain the nature of the "spectrum" and the difficulties associated in diagnosing especially when co-morbidities are present, o classify and present aetiological factors, both genetic and environmental in the causation of epilepsy and syndromes o Acquire knowledge of how the presentation of abuse may be altered in children with learning difficulties and other developmental disorders o Detect alterations in children's development that might suggest the child has been maltreated or neglected.
3	Prerequisites and learning activities	Students should have knowledge of Child Psychiatry I, Rehabilitation and Pediatrics
4	Teaching methods and language	Lectures and Seminars Language : Italian Ref. Text Books: -Teacher's Notes
5	Assessment methods and criteria	Oral Exam

<p>Programme of "RIEDUCAZIONE DELL'APPRENDIMENTO" "LEARNING RE-EDUCATION: in disabled boys and girls between 6 and 18 years"</p>		
<p>This course is composed by three Modules: 1) Handicap Psychology and Rehabilitation, 2) Evaluation and Validation of Intervention Techniques, 3) General Pedagogy</p>		
<p>D2717, Compulsory 1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 3rd year, 1st semester</p>		
<p>Number of ECTS credits: 10 (total workload:250 hours, 1 credit =25 hours)</p>		
<p>1) HANDICAP PSYCHOLOGY AND REHABILITATION (3 ECTS)</p>		
<p>Teacher: Enzo SECHI</p>		
1	Course objectives	<p>The goal of this course is to provide information and to guide the students towards the understanding of developmental disorders and disabilities from early childhood to school age, with particular attention to the trajectories and changing manifestations of developmental disorders during children development.</p>
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> o Learning disorders o Specific verbal disorders o Specific non verbal disorders o Learning disorders in children with intellectual disabilities o Comorbidity with learning disorder and other psychopathological disorders o Learning disorders in ADHD children o Neuro and psychomotor rehabilitation in learning disorders <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o have profound knowledge of main issues concerning brain injury, strokes, spinal cord injuries, multiple sclerosis, limb amputations, and depression and its links to disability. o have knowledge and understanding of the role Rehabilitation Psychology in developing therapeutic interventions aimed at promoting the health and well-being of people with disabilities and chronic health conditions or diseases. ; o be able to explain the main rehabilitation techniques o be aware of their role as therapists, educators, counselors, that needs wide variety of training and skills, including knowledge of neuropsychology, o be able to apply and extend psychological knowledge toward ameliorating psychological, social, mental, psychiatric, environmental, and other challenges that prevent people with disabilities from leading meaningful, independent, and productive lives.
3	Prerequisites and learning activities	The student must know anatomy, developmental psychology and child neuropsychiatry
4	Teaching methods and language	Lectures; team work; tutorials. Language: Italian

		Ref. Text books: Guidetti V. (a cura di) <i>Fondamenti di Neuropsichiatria della età evolutiva</i> (Il Mulino, Bologna) -M.M. Formica (a cura di) <i>Trattato di Neuropsichiatria riabilitativa</i> (Cuzzolin editore).
5	Assessment methods and criteria	Oral exam.
2) EVALUATION AND VALIDATION OF INTERVENTION TECHNIQUES (3 ECTS)		
Teacher: Maria Diana BISCAINI		
1	Course objectives	The goal of this course is to develop the concept of evaluation, experimentation, measuring in pedagogy and psychology. In addition, the course aims at offering the students a multifactorial and complex vision of development that allows to understand the great inter-individual variability found in different disorders, highlighting the need for an integrated approach to analyze the continuous and reciprocal interaction between genetic, biological, environmental and social factors. Finally, the course aims to provide students with the tools of observation and rehabilitation that can be used in the educational practice.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - The intervention in rehabilitation setting - Clinical observation - Clinical interview - Clinical and rehabilitation diagnosis - Development Evaluation - Evaluation Models - Data Analysis and Interpretation - Building a Performance-Based Monitoring and Evaluation System - Development Evaluation Issues <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o know and understand the development evaluation process o be familiar with evaluation concepts, techniques, and issues o be able to weight different options for planning development, evaluations, including data collection, analysis, and reporting o be able to design a development evaluation
3	Prerequisites and learning activities	The student must know developmental psychology, child and adolescent neuropsychiatry
4	Teaching methods and language	Lectures; team work; tutorials. Language: Italian Ref. Text books: -M.Tomassi: " <i>Teoria e tecnica delle interviste in psicologia</i> ", (ED. Franco Angeli) -G.Pesci, " <i>La diagnosi pedagogica</i> ", (ed. Armando)
5	Assessment methods and criteria	Oral exam.
3) GENERAL PEDAGOGY (4 ECTS)		
Teacher: Gabriele GAUDIERI		
1	Course objectives	The goal of this course is to ascertain the epistemological statute of pedagogy. The main principles will be linked to clinical and rehabilitative goals.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - The main themes of pedagogy from 17th to 21st century - The intercultural education - The relationship between professionals and users - Adolescents and esoteric world: the manipulation <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o be able to understand and use the language of pedagogy; o be able to grasp the specificity of the pedagogical approach to educational problems and processes compared with the approach adopted by other disciplines; o be familiar with some of the main educational issues of the present historical moment; o be able to apply the concepts to the specific needs of re-education and rehabilitation.
3	Prerequisites and learning	The student must know developmental psychology, child and adolescent neuropsychiatry

	activities	
4	Teaching methods and language	Lectures; team work; tutorials. Language: Italian Ref. Text books: Lukas G., <i>Quattro anni all'inferno</i> , ed. Apogeo-TEA, 1999. Crone E., <i>Nella testa degli adolescenti</i> , Urra Ed., 2012
5	Assessment methods and criteria	Oral exam.

Programme of "NEURO E PSICOMOTRICITA'" **"NEURO AND PSYCHOMOTRICITY"**

This course is composed by 2 Modules: 1) Methods of Therapy and Neuro-Psychomotricity,
2) Techniques of Body Expression

D2708, Compulsory

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 3rd year, 1st semester

Number of ECTS credits: 6 (total workload:150 hours, 1 credit =25 hours)

1) METHODS OF THERAPY AND NEURO- PSYCHOMOTRICITY (3 ECTS)

Teacher: Marta PUZZILLI

1	Course objectives	The goal of this course is 1) to provide the knowledge of the neuropsychomotor disorders in children, 2) to enable the students to learn an exhaustive evaluation of psychomotor behaviour in children, 3) to enable the students to assimilate an neuropsychomotor rehabilitative program in children according to individual profiles.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Maturation and learning of motor development. The concept of praxic development in children according to neuropsychology and developmental psychology. - The so called minimal brain damage and minor neurological disorder. Neurological exam and motor evaluations - The specific motor disorder and the developmental coordination disorder. The developmental dyspraxia - The developmental Dysgraphia and other Specific Learning Disorders - The development of language in children with neuropsychomotor problem - Autism spectrum disorder <p>On successful completion of this module, the student should</p> <ul style="list-style-type: none"> o have profound knowledge of the development of psyghomotor in children, o have knowledge and understanding the differences between motor delay and neuropsychomotor disorders, o understand and explain some cognitive intervention to reduce maladaptive behaviours and to suggest educational approach to the family o understand and decide wich type of neuropsychomotor program must be used according to the type of disorder. o demonstrate skills in communication and in increasing verbal and non verbal communication in young patients and their caregivers., o demonstrate capacity for reading and understand other texts on related topics.
3	Prerequisites and learning activities	The student must know developmental psychology, child and adolescent neuropsychiatry.
4	Teaching methods and language	Lectures in classroom, team work, clinical groups on evaluation and intervention. Language: Italian Ref. Text books : -Maurizio Maria Formica (ed.) <i>Trattato di Neurologia Riabilitativa</i> Cuzzolin Napoli 2003 - <i>Diagnostic and Statistical Manual of mental Disorders</i> DSM5 APA 2013 -Giovanni Battista Camerini ed Enzo Sechi (eds.) <i>Riabilitazione psicosociale nell'infanzia e nell'adolescenza</i> , Maggioli Santarcangelo di Romagna 2010
5	Assessment methods and criteria	Oral exam, short clinical reports.

2) TECHNIQUES OF BODY EXPRESSION (3 ECTS)

Teacher: Rachele GIAMMARIO

1	Course objectives	The goal of this module is to provide the knowledge of the history of the theatre and its educational and psychological functions in people with mental disorders. On successful completion of this module, the student should understand the role of theatrical entertainment to improve both his self-expressive competences and the body expressive competence of people with mental disorders.
2	Course content and Learning outcomes (Dublin descriptors)	Topics of the module include: Theory: - The theater: history of theater; psychological and educational function of the theater; - Theatrical entertainment: characters and methodology, dramatization and improvisation; - The art of miming; psychological and educational function of the body expression. Practical exercises: - The body organization; - Concentration exercises; - The body expression: the facial mask, the mirror, the multiple mirror, flashes, sculptural scenes, mood scenes; - Exercises of composition; - Study of the structure and analysis of a theatrical text, aimed to the mise-en-scene. On successful completion of this module, the student should: o have knowledge and understanding of the educational and psychological functions of the theater Techniques and Tools; o applying and explain the importance of theatrical entertainment in order to improve the expressive competence of people with mental disorders; o understand the benefits and the limitations of the theatrical involvement of the users; o demonstrate skill in expressing verbal and nonverbal feelings and better understanding the inner world of the users affected by serious mental disorders; o demonstrate capacity for reading and understand other texts and consult scientific database on related topics.
3	Prerequisites and learning activities	Basic knowledge of psychology
4	Teaching methods and language	Lectures in classroom. Language: Italian. Ref. Text books: -AA.VV. <i>Educazione attraverso il teatro</i> . Emme Edizioni, 1979 -Kast V., <i>Le fiabe che curano</i> . Red Edizioni, 2006 -Lecoq J., <i>Il corpo poetico</i> . Ubulibri, 2000 -Moreno J.L., <i>Il teatro della spontaneità</i> . Guarnaldi Editore, Firenze, 1980a -Pozzi E., Minoia V. (a cura di), <i>Di alcuni teatri delle diversità</i> . Anc Edizioni, Cartoceto, 1999 -Renaud CP., <i>Espressione corporea</i> (linguaggio del silenzio). Edizioni del Corpo, Milano, 1978
5	Assessment methods and criteria	Oral exam and mise-en-scene of the text analyzed during the teaching module

**Programme of "AUDIOLOGIA E MALATTIE DELL'APPARATO VISIVO"
"AUDIOLOGY AND VISUAL APPARATUS PATHOLOGIES"**

This course is composed by 2 Modules: 1) Audiology, 2) Visual Apparatus Pathologies		
D2717, Compulsory		
1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE, 3rd year, 1st semester		
Number of ECTS credits: 3 (total workload:75 hours, 1 credit =25 hours)		
1) AUDIOLOGY (2 ECTS)		
Teacher: to be hired		
1	Course objectives	This Module focuses on the structure and function of neurosensory systems. Students will gain an appreciation of how the function of auditory, visual and neurophysiological systems is dependent on the underlying anatomical structure and physiological mechanisms.
2	Course content and Learning outcomes (Dublin descriptors)	Topics of the module include: - An overview of the anatomy and physiology of the human body, - Anatomy and physiology of neurosensory systems,

		<ul style="list-style-type: none"> - Central and peripheral neural pathways, - Neural plasticity, - Concept of effective amplification, - Fitting aids to infants, - Advanced technological features of digital hearing aids, - Non linear fitting strategy, - Verification measures, - Evaluation methods in the clinic and real world, - Acoustics of speech and effective communication. <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o know and understand the basic mathematics and physics relevant to introductory acoustics and the use of appropriate units, o be able to describe and explain the essential structures and functions of auditory pathways; o understand key aspects of the perception of sound and how these relate both to speech perception and to the underlying anatomy and physiology ; o demonstrate critical awareness of the effect that a hearing loss has on the overall cognitive development of a child and the impact of subsequent intervention through amplification, with reference to neural plasticity and age of intervention; o demonstrate an awareness of the difficulties faced by deaf children in the classroom and in their development process; o demonstrate skills in fitting and verification procedures; evaluation questionnaires; speech tests.
3	Prerequisites and learning activities	The student must know anatomy, physiology and neurology.
4	Teaching methods and language	Lectures; team work; tutorials. Language: Italian Ref. Text books: -Teacher's Notes
5	Assessment methods and criteria	Oral exam.
2) VISUAL APPARATUS PATHOLOGIES (1 ECTS)		
Teacher: to be hired		
1	Course objectives	This Module focuses on the structure and function of neurosensory systems. Students will learn how the function of visual systems is dependent on the underlying anatomical structure and physiological mechanisms and how pathologies of visual apparatus can determine dysfunctions in the development of children.
2	Course content and Learning outcomes (Dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> - Eye refraction and Refractive disease: pathophysiology and treatment - Basics of ophthalmic instrumental diagnostics - Orbit and Icrimal tract diseases. - Glaucomas: chronic open angle, congenital, secondary, chronic and acute closed angle. The cataracts: congenital, acquired, age-related. - Retinal vascular diseases, Diabetic and hypertensive retinopathy - Vitreoretinal pathologies: - Uveitis and systemic disease. - Congenital and concomitant strabismus. - Functional ambliopia: diagnosis, treatment, prevention. - Paralytic strabismus and gaze palsy. <p>On successful completion of this module the student should</p> <ul style="list-style-type: none"> o be able to describe the nature of light and concepts of optics, including refraction, focal length, optic power, and the effects of convex and concave lenses, o be able to discuss the essential structures and functions of visual pathways, o understand key aspects of the perception of visual stimuli and how these relate to the underlying anatomy and physiology, o be aware of the difficulties faced by blind children in the classroom and in their development process; o demonstrate critical awareness of the effect that a sight loss or decline have on the overall cognitive development of a child and the impact of subsequent intervention

		through correction, with reference to neural plasticity and age of intervention.
3	Prerequisites and learning activities	The student must know anatomy, physiology and neurology.
4	Teaching methods and language	Lectures; team work; tutorials. Language: Italian Ref. Text books: - Teacher's Notes
5	Assessment methods and criteria	Oral exam.

Programme of "TIROCINIO I, II, III"
"INTERNSHIP I, II, III"

Students will attend care settings of Child and Adolescent Neuropsychiatric Clinical Department and Developmental Rehabilitative Department

D3638 INTERNSHIP I, Compulsory (20 ECTS), 1st year, 2nd semester

D3640 INTERNSHIP II, Compulsory (17 ECTS), 2nd year, 2nd semester

D3642 INTERNSHIP III, Compulsory (23 ECTS), 3rd year, 2nd semester

1st Cycle Degree in NEURO-PSYCHOMOTOR THERAPY IN DEVELOPMENTAL AGE

Number of ECTS credits: 60 (total workload: 1500 hours, 1 credit =25 hours)

INTERNSHIP II

Coordinator: Maria Paola COLATEI

1	Course objectives and Learning outcomes	The internship allows the student to: <ul style="list-style-type: none"> • Learn neurocognitive and psychomotor difficulties in disabled children from 6 months to 6 years, • Learn functional diagnosis in order to understand common lines of therapeutic and rehabilitative programs • Make a point of view of application to foreground; • Integrate theoretical knowledge with practice; • Anticipate experience things that will deepen thereafter; • Maturing diagnostic skills (clinical judgment), through the formulation of hypotheses; • Ensure the welfare activities in the light of the principles of EBN; • Develop decision-making skills.
2	Course content and Learning outcomes (Dublin descriptors)	Topics include: Practical experiences of Nursing and Rehabilitation processes as occur in everyday life of the Department of Child and Adolescent Neuropsychiatry. Students, through the years, will observe and practice pathologies of people from non-severe to severe disease states. On successful completion of Internship, the student should: <ul style="list-style-type: none"> ○ acquire knowledge and understanding of the basic nursing, ○ apply knowledge and understanding to the organization of the clinical settings, ○ be able to practice basic nursing care, ○ be able to relate and communicate using appropriate terms to the patients and to other professionals about the basic nursing, ○ be able to assess the own knowledge needs and then plan future learning in these topics.
3	Prerequisites and learning activities	The student must attended nursing simulation and laboratory activity. The student must know anatomy, physiology and pathology about musculoskeletal system.
4	Teaching methods and language	Internship of care settings Language: Italian Ref. Text books: <ul style="list-style-type: none"> ○ <i>"Manuale di tecniche e procedure infermieristiche di Taylor"</i>, Piccin 2013.
5	Assessment methods and criteria	Short report and practice exam. Oral exam and written report