

Master's Degree in Dentistry and Dental Prosthetics 2023/2024

Integrated Teaching: Neurology and Psychiatry Scientific Disciplinary Sectors: MED/26, MED/25 Responsible Professor: Prof. <u>Stefania Chiappini</u>; e-mail: <u>stefania.chiappini@unicamillus.org</u> Number of University Educational Credits (CFU): 4

Module: Neurology Scientific Disciplinary Sector: MED/26 Number of University Educational Credits (CFU): 3 Professor: Prof. Andrea Romigi; e-mail: andrea.romigi@unicamillus.org

Module: Psychiatry Scientific Disciplinary Sector: MED/25 Number of University Educational Credits (CFU): 1 Professor: Prof. Stefania Chiappini; e-mail: stefania.chiappini@unicamillus.org

PREREQUISITES

Although there are no prerequisites, a basic knowledge of human biology and physiology, elements of medical pathology and pharmacology and a preliminary knowledge in neurophysiology and in general psychology are required to understand the integrated teaching.

LEARNING OBJECTIVES

The course aims to provide the history of psychiatry and the fundamentals of neurology, neurophysiology, and psychopathology together with a knowledge of neurophysiopathology, clinical, nosographic classification and treatment of the main neurological and psychiatric pathologies. One of the objectives will be to acquire the main information on the neurological pathologies of major dental interest and aspects of the dental clinic that most frequently require a neurological, psychiatric or psychological approach or otherwise show a closer correlation with neurophysiology or with emotional variables. An overview of the organisation of community psychiatric care will also be provided.

LEARNING OUTCOMES

Knowledge and understanding

At the end of the course the student should have acquired:

- Acquisition of the main concepts of neurology
- Acquisition of the main concepts of neurophysiology with particular attention to aspects of major dental interest
- Acquisition of knowledge about the main neurological disorders, their nosography and their clinic
- Acquisition of knowledge about pharmacological interventions in neurological disorders
- Acquisition of knowledge of the main electrophysiological examinations (electroencephalography, evoked potentials, electromyography, polysomnography) of



particular interest to dentists

- Acquisition of the main concepts of descriptive psychopathology
- Acquisition of knowledge about the historical evolution of psychiatry: models and schools of thought, definition and tasks of the psychiatrist
- Acquisition of systematic, operational and applicative skills of the main psychiatric disorders, their nosography and their clinic
- Acquisition of knowledge about psychopharmacological, psychotherapeutic and psychosocial interventions in psychiatric disorders
- Acquisition of knowledge of the territorial organization of psychiatric services and assistance in psychiatry

Applying knowledge and understanding

By the end of the course, the student should have acquired:

- the ability to recognise the main neurological disorders.
- skills to facilitate the approach to the dental patient based on knowledge of neurophysiology and clinical neurology.
- the ability to recognize and diagnose major psychiatric, mental, cognitive and emotional disorders.
- Skills that facilitate the approach to the dental patient based on knowledge of psychopathology.
- The ability to communicate and manage information in the context of direct services to individuals, families, groups, organizations and communities.

Communication skills

At the end of the teaching the student should know how to

- Use specific terminology appropriately.
- Use the main terms of neurology and neurophysiology appropriately.
- Use up-to-date and computerised tools.
- Use specific terminology appropriately.
- Use correctly the main terms of psychopathology in the appropriate context.
- Use the updated tools for communication and management of information, experience and professional skills in the field of services aimed at people, groups, organizations and communities.

Making judgements

At the end of the course, the student should be able to make broad assessments of the topics covered.

Learning skills

The student will have acquired learning skills and methods suitable for deepening and improving his/her skills in the field of neurology, also by consulting the scientific literature.



COURSE SYLLABUS

<u>Neurology</u>

- Neurological diseases: framework, epidemiology
- Neurological history and neurological examination
- Instrumental examinations
- Sensitivity and pain
- The pyramidal and extrapyramidal motor system and the cerebellum
- Cranial nerves and special sensitivity
- Cerebral and csf circulation
- Headaches and facial pain
- Cognitive disorders: aphasia, agnosia, apraxia, memory
- Dementia
- Sleep
- Epilepsy
- Cerebrovascular diseases
- Demyelinating diseases
- Movement disorders
- Neuromuscular diseases
- Chain traumas
- Spinal cord diseases

Psychiatry

History of psychiatry

- Elements of psychopathology
- Doctor-patient relationship
- The psychiatric Interview
- Elements of psychiatric semeiotics
- Perception
- Memory
- Thinking
- Intelligence
- Affectivity
- Motor behaviour
- Attention
- Consciousness

The main psychiatric disorders

- Schizophrenia
- Mood disorders
- Anxiety disorders
- Obsessive-compulsive disorder
- Disorders associated with traumatic or stressful events
- Personality disorders
- Hysteria and disorders with somatic symptoms



- Eating behaviour disorders
- Substance use disorder and behavioural addictions

Treatments in psychiatry:

- Principles of psychopharmacology
- Main psychotherapeutic orientations

Legislation and organisation of community psychiatric care

COURSE STRUCTURE

The teaching is structured in face-to-face lectures, divided into lectures of 2 to 5 hours depending on the academic calendar. Frontal teaching includes theoretical lectures and possible seminars on topics covered.

COURSE GRADE DETERMINATION

Students' knowledge will be verified through a written exam with questions containing multiplechoice answers, related to the topics explored during classes and specific clinical cases.

The examination will be assessed according to the following criteria:

➤ Inadequate: major deficiencies and/or inaccuracies in knowledge and understanding of the topics; limited ability to analyze and synthesize, with frequent generalizations.

➤ 18-20: barely sufficient knowledge and understanding of the topics with possible imperfections; sufficient capacity for analysis, synthesis and autonomy of judgement.

 \succ 21-23: routine knowledge and understanding of the topics; correct analysis and synthesis skills with coherent logical argumentation.

 \succ 24-26: fair knowledge and understanding of the arguments; good analytical and synthetic skills with rigorously expressed arguments.

> 27-29: comprehensive knowledge and understanding of the subject matter; considerable ability to analyze and synthesize. Good autonomy of judgement.

READING MATERIALS

<u>Neurology</u>

- CORE CURRICULUM. MALATTIE DEL SISTEMA NERVOSO 2 edizione McGraw Hill Editore. CARLO FERRARESE E AAVV
- Principi di neuroscienze. Con e-book CEA editore Kandel. 5° edizione Italiana

Psychiatry

- Martinotti G. Handbook of Psychopathology. Ed. Fila 37, 2023
- Kaplan & Sadock's Synopsis of Psychiatry Twelfth, North American Edition
- Blaney P. et al: Oxford Textbook in Clinical Psychology, 2014