Professional Master's Degree

Clinical Neuropsychology

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Professional Master's Degree

Clinical Neuropsychology

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/in/nursing/professional-master-degree/master-clinical-neuropsychology**

Index

01

Introduction

The health crisis due to COVID-19 has severely worsened the mental health of the younger population. The rapid increase in these conditions at younger ages makes it necessary to have a current health care workforce that focuses on these types of cases. Moreover, in recent years, mental disorders have led to problems such as allergies and obesity, and even cardiovascular disorders, making it difficult to treat sufferers. Taking into account the demand for multidisciplinary specialists in the clinical sector, TECH offers a complete program that develops the knowledge of healthcare with a current and technological focus. With this program, graduates will be able to learn in detail the latest advances applicable to the neurological discipline. All this through a 100% online degree with which they can work on the improvement of their professional skills, being able to balance it with their personal and working conditions.

TECH offers this Professional Master's Degree as a scientifically rigorous program with which you will be able to expand your knowledge on the principles of cerebral biochemistry through a 100% online format"

Given the increase in brain disorders in recent years, Clinical Neuropsychology has developed enormously, providing in-depth knowledge of the development of mental disorders. For this purpose, the exhaustive study of the relationships between the brain and the behavior of the clinical cases has been fundamental. In order to respond to the professional demand of healthcare centers and to update the knowledge of nurses in this area, TECH and its team of experts in Nursing and Neurology have developed this Professional Master's Degree in Clinical Neuropsychology.

It is a multidisciplinary and intensive program that will provide graduates with all the information they need to master the latest developments in this discipline. By taking the Professional Master's Degree, nurses will delve into the basics of Neurology, as well as the principles of Neuroanatomy, with special emphasis on cognitive functions and the different types of neurobiological principles that are known today. It will also delve into brain damage and aphasia, agraphia and alexia, as well as cognitive deficits and neurodegenerative diseases. Finally, it will focus on the main techniques of neuropsychological evaluation and rehabilitation, and will conclude with an exhaustive review of the most effective pharmacological treatments, their recommendations and the cases in which they should be avoided.

All of this, through a 100% online program which includes 1500 hours of theoretical, practical and additional material chosen and designed by the teaching team. Furthermore, the digital characteristics of the content make the program a dynamic and simple experience. It is based on downloadable content so that students only need to have a device and an Internet connection. In this way, they will be able to access the materials offline, even after the end of the program.

This **Professional Master's Degree in Clinical Neuropsychology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in Psychology and Neurology
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Expand your healthcare knowledge by addressing the origins of neuroanatomy and learning more about the early authors to determine future perspectives"

A program designed in relation to the latest scientific advances in neuropsychology and that covers cognitive functions and the latest developments related to the different neurobiological bases"

You'll take an in-depth review of functional neuroanatomy, from neuron composition to brain asymmetry.

With this Professional Master's Degree, you will update your knowledge in different types of practice such as ideomotor, ideational, visuoconstructive, facial and clothing.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

Clinical Neuropsychology is a constantly evolving science that requires professional skills to master the latest technologies in its prevention and treatment. The main objective of this program is for nurses to gain a cutting-edge view of the nervous system and behavior of mental disorders. For this purpose, TECH will provide innovative tools through audiovisual materials in different formats. In this way, the program will constitute a highly beneficial academic experience to develop as a specialized professional in this branch of nursing.

TECH aims to broaden your foundation in functional neuroanatomy so that you can learn the latest techniques for brain intervention"

General Objectives

- Describe the overall working of the brain and the biochemistry that activates or inhibits it
- Use brain activity as a map for mental health disorders
- Describe the brain-mind relationship
- Develop knowledge of the technology which can provoke changes in the brain in order to overcome mental illnesses
- Describe the most common neurological disorders in psychological behavior
- Describe the relationship between the central nervous system, the endocrine system and immune systems
- Understand current psychopharmacology and integrate this knowledge into psychological tools that can improve mental illness

A program that will give your career a professional boost thanks to the high level of precision with which each section has been designed"

Specific Objectives

Module 1. Introduction to Neuropsychology

- Know the beginnings of neuropsychology and its first studies
- Learn about the principles of neurobiology
- Get to know and contextualize the principles of the development of the central nervous system

Module 2. Principles of Neuroanatomy

- Gain knowledge about the origins and the evolutionary process of the nervous system
- Obtain a general vision on the formation of the nervous system
- Know the basic fundamentals of neuroanatomy

Module 3. Functional Neuroanatomy

- Learn and understand about the principles of functional neuroanatomy
- Differentiate between the different brain zones and their functioning

Module 4. Cognitive Functions

- Get to know the most important cognitive functions
- Know and contextualize the neurobiological principles of the cognitive functions
- Gain knowledge on the principles and origins of cognitive functions

Module 5. Brain Injury

- Know and contextualize the principles of brain injury
- Get to know and differentiate between the different types of brain injury
- Learn the different disorders derived from brain injury

Module 6. Aphasias, Agraphias and Alexias

- Know and internalize the priciniples of aphasias, agraphias and alexias
- Gain knowledge of the classification and characteristics specific to aphasias, agraphias and alexias
- Get to know the assessment and diagnosis of aphasias, agraphias and alexias

Module 7. Cognitive Deficiencies

- Know and contextualize the different cognitive deficiencies
- Classify the cognitive deficiencies according to their symptoms

Module 8. Neurodegenerative Diseases

- Learn about the principles of neurodegenerative diseases
- Differentiate between and contextualize the different neurodegenerative diseases
- Know the different types of dementia and learn how to differentiate between them

Module 9. Neuropsychological Assessment and Rehabilitation

- Gain knowledge about the principles of neuropsychological assessment and rehabilitation
- Know the different assessment tools that exist within neuropsychology
- Get to know the different techniques in neuropsychological rehabilitation

Module 10. Pharmacological Treatment

- Know and learn about the principles and foundations of psychopharmacology
- Get to know and classify the different types of psychopharmaceuticals
- Gain knowledge and contextualize the different uses of psychopharmacological therapy

03

Skills

This program has been designed so that the specialists who enroll acquire all the skills required of a professional versed in Clinical Neuropsychology. In this sense, TECH has configured a structure that allows nurses to complete this program with all the guarantees of having the most up-to-date knowledge in diagnostic and pharmacological techniques. This program will contribute to the speed of its actions and interventions in the treatment of depression, eating disorders and sleep disorders, among other pathologies.

Thanks to this Professional Master's Degree, you will obtain multidisciplinary skills by improving your work methods, such as treatment with psychotropic drugs"

General Skills

- Recognize patterns and indicators of mental illness
- Accompany your students with mental illness, knowing the processes and how they occur
- Give support and encouragement to the mentally ill patient and their family based on comprehensive knowledge

Develop your professional career by focusing on patients suffering from mental illnesses to apply the knowledge in your daily clinical work"

Specific Skills

- Describe the neurological principles of behavior
- Explain the principles of neuroanatomy
- Know the principles of cerebral biochemistry
- Describe the biochemistry of mental disorders
- Know how neuroanatomy and mental disorders work
- Recognise the biochemistry and neuroanatomy of the most well-known mental disorders in the the practitioner's outpatient clinic
- Distinguish the pharmacological treatments available
- Know what neurobehavioral networks are, and how they work
- Get to know the stages of pharmacological intervention in anxiety and stress disorders
- Gain knowledge about the processes for intervention with psychotropic drugs in depression, eating disorders, and sleep disorders

04

Course Management

TECH is continually committed to academic excellence. For this reason, each of its programs has teaching teams of the highest reputation. These experts have extensive experience in their professional fields and, at the same time, have achieved significant results with their empirical research and fieldwork. In addition, these specialists play a leading role within the university qualification, as they are in charge of selecting the most up-to-date and innovative content to be included in the syllabus. In addition, they participate in the elaboration of numerous multimedia resources of high pedagogical rigor.

The teaching materials of this program, elaborated by these specialists, have contents that are completely applicable to your professional experiences"

International Guest Director

Dr. Steven P. Woods is a leading neuropsychologist, internationally recognized for his outstanding contributions to improving clinical detection, prediction and treatment of real-world health outcomes in diverse neuropsychological populations. He has forged an exceptional career path, which has led him to publish over 300 articles and serve on editorial boards in 5 major Clinical Neuropsychology journals.

His excellent scientific and clinical work focuses primarily on the ways in which cognition can hinder and support daily activities, health and well-being in adults with chronic medical conditions. Other areas of scientific relevance, for this expert, also include health literacy, apathy, intra-individual variability and internet navigation skills. His research projects are funded by the National Institute of Mental Health (NIMH) and the National Institute on Drug Abuse (NIDA).

In this regard, Dr. Woods' research approach explores the application of theoretical models to elucidate the role of neurocognitive deficits (e.g., memory) in everyday functioning and health literacy in people affected by HIV and aging. In this way, his interest focuses, for example, on how people's ability to "Remember to Remember", the so-called prospective memory, influences health-related behaviors, such as medication adherence. This multidisciplinary approach is reflected in his groundbreaking research, available on Google Scholar and ResearchGate.

He has also founded the Clinical Neuropsychology Service at Thomas Street Health Center, where he holds a senior position as Director. Here, Dr. Woods provides Clinical Neuropsychology services to people affected by HIV, providing critical support to communities in need and reaffirming his commitment to the practical application of his research to improve lives.

Dr. Woods, Steven P.

- Founder and Director of the Clinical Neuropsychology Service at the Thomas Street Health Center
- Collaborator in the Department of Psychology, University of Houston
- Associate Editor at Neuropsychology and The Clinical Neuropsychologist
- Ph.D. in Clinical Psychology, with a specialization in Neuropsychology, Norfolk State University
- B.S. in Psychology, Portland State University
- Member of:
  - National Academy of Neuropsychology
  - American Psychological Association (Division 40, Society for Clinical Neuropsychology)

Thanks to TECH, you will be able to learn with the best professionals in the world"

05

Structure and Content

The syllabus of this program in Clinical Neuropsychology has been carefully designed with a team of experts in the health area. This teaching team has been in charge of planning the contents of the program, which endorses its information and guarantees the correct theoretical training of the specialists. In addition, following the criteria of quality and timeliness that characterize this organization, the degree is developed based on the Relearning methodology, which will exempt students from long hours of study by acquiring knowledge in a progressive and constant way. Therefore, it is an opportunity to catch up in a rigorous and dynamic way.

In the Virtual Classroom you will find additional high-quality downloadable material so that you can delve deeper into those aspects of the syllabus that you consider most relevant"

Module 1. Introduction to Neuropsychology

1.1. Introduction to Neuropsychology
- 1.1.1. Principles and Origins of Neuropsychology
- 1.1.2. First Approaches to the Discipline

1.2. First Approaches to the Neuropsychology
- 1.2.1. First Works Within Neuropsychology
- 1.2.2. Most Relevant Authors and Works

1.3. Ontogeny and Phylogeny of the CNS
- 1.3.1. Concept of Ontogeny and Phylogeny
- 1.3.2. Ontogeny and Phylogeny Within the CNS

1.4. Cellular and Molecular Neurobiology
- 1.4.1. Introduction to Neurobiology
- 1.4.2. Cellular and Molecular Neurobiology

1.5. Neurobiology of Systems
- 1.5.1. Concepts of Systems
- 1.5.2. Structures and Development

1.6. Embryology of the Nervous System
- 1.6.1. Principles of Embryology of the Nervous System
- 1.6.2. Phases of CNS Embryology

1.7. Introduction to Structural Anatomy CNS
- 1.7.1. Introduction to Structural Anatomy
- 1.7.2. Structural Development

1.8. Introduction to Functional Anatomy
- 1.8.1. What is Function Anatomy?
- 1.8.2. Most Important Functions

1.9. Neuroimaging Techniques
- 1.9.1. Concept of Neuroimaging
- 1.9.2. Most Commonly Used Techniques
- 1.9.3. Advantages and Disadvantages

Module 2. Principles of Neuroanatomy

2.1. Formation of the Nervous System
- 2.1.1. Anatomical and Functional Organization of the Nervous System
- 2.1.2. Neurons
- 2.1.3. Glial Cells
- 2.1.4. Central Nervous System: Brain and Spinal Cord
- 2.1.5. Main Structures
  - 2.1.5.1. Forebrain
  - 2.1.5.2. Midbrain
  - 2.1.5.3. Rhombencephalon

2.2. Formation of the Nervous System II
- 2.2.1. Peripheral Nervous System
  - 2.2.1.1. Somatic Nervous System
  - 2.2.2.2. Neurovegetative or Autonomic Nervous System
  - 2.2.2.3. White Matter
  - 2.2.2.4. Gray Matter
  - 2.2.2.5. Meninges
  - 2.2.2.6. Cerebrospinal Fluid

2.3. The Neurone and its Composition
- 2.3.1. Introduction to the Neurone and its Function
- 2.3.2. The Neurone and its Composition

2.4. Electric and Chemical Synapses
- 2.4.1. What is a Synapse?
- 2.4.2. Electrical Synapse
- 2.4.3. Chemical Synapse

2.5. Neurotransmitters
- 2.5.1. What is a Neurotransmitter?
- 2.5.2. Types of Neurotransmitters and their Functioning

2.6. Neuroendocrinology (Hypothalamus-Endocrine System Relationship)
- 2.6.1. Introduction to Neuroendocrinology
- 2.6.2. Principles of Neuroendocrinological Functioning

2.7. Neuroimmunology (Relationship between the Nervous System and Immune System)
- 2.7.1. Introduction to Neuroimmunology
- 2.7.2. Principles and Fundamentals of Neuroimmunology

2.8. Nervous System in Childhood and Adolescence
- 2.8.1. Development of CNS
- 2.8.2. Principles and Characteristics

2.9. Nervous System in Adulthood
- 2.9.1. Principles and Characteristics of the CNS

2.10. Nervous System in Old Age
- 2.10.1. Principles and Characteristics of the CNS in Old Age
- 2.10.2. Main Related Problems

Module 3. Functional Neuroanatomy

3.1. Frontal Lobe
- 3.1.1. Introduction to the Frontal Lobe
- 3.1.2. Main Features
- 3.1.3. Principles of their Functioning

3.2. Neuropsychology of the Dorsolateral Prefrontal Cortex
- 3.2.1. Introduction to the Dorsolateral Prefrontal Cortex
- 3.2.2. Main Features
- 3.2.3. Principles of their Functioning

3.3. Neuropsychology of the Orbitofrontal Cortex
- 3.3.1. Introduction to the Orbitofrontal Cortex
- 3.3.2. Main Features
- 3.3.3. Principles of their Functioning

3.4. Neuropsychology of the Medial Prefrontal Cortex
- 3.4.1. Introduction to the Dorsolateral Prefrontal Cortex
- 3.4.2. Main Features
- 3.4.3. Principles of their Functioning

3.5. Motor Cortex
- 3.5.1. Introduction to the Motor Cortex
- 3.5.2. Main Features
- 3.5.3. Principles of their Functioning

3.6. Temporal Lobe
- 3.6.1. Introduction to the Temporal Lobe Cortex
- 3.6.2. Main Features
- 3.6.3. Bases of their Functioning

3.7. Parietal Lobe
- 3.7.1. Introduction to the Parietal Lobe Cortex
- 3.7.2. Main Features
- 3.7.3. Bases of their Functioning

3.8. Occipital Lobe
- 3.8.1. Introduction to the Occipital Lobe Cortex
- 3.8.2. Main Features
- 3.8.3. Bases of their Functioning

3.9. Cerebral Asymmetry
- 3.9.1. Concept of Brain Asymmetry
- 3.9.2. Characteristics and Functioning

Module 4. Cognitive Functions

4.1. Neurological Principles of Attention
- 4.1.1. Introduction to the Concept of Attention
- 4.1.2. Neurobiological Principles and Foundations of Attention

4.2. Neurobiological Principles of Memory
- 4.2.1. Introduction to the Concept of Memory
- 4.2.2. Neurobiological Principles and Foundations of Memory

4.3. Neurological Principles of Language
- 4.3.1. Introduction to the Concept of Language
- 4.3.2. Neurobiological Principles and Foundations of Language

4.4. Neurobiological Principles of Perception
- 4.4.1. Introduction to the Concept of Perception
- 4.4.2. Neurobiological Principles and Foundations of Perception

4.5. Visuospatial Neurobiological Principles
- 4.5.1. Introduction to Visuospatial Functions
- 4.5.2. Principles and Fundamentals of Visuospatial Functions

4.6. Neurobiological Principles of Executive Functions
- 4.6.1. Introduction to Executive Functions
- 4.6.2. Principles and Fundamentals of Executive Functions

4.7. Apraxias
- 4.7.1. What are Praxis?
- 4.7.2. Features and Types

4.8. Gnosis
- 4.8.1. What is Praxis?
- 4.8.2. Features and Types

4.9. Social Cognition
- 4.9.1. Introduction to Social Cognition
- 4.9.2. Characteristics and Theoretical Foundations

Module 5. Brain Injury

5.1. Neuropsychological and Behavior Disorders of Genetic Origin
- 5.1.1. Introduction
- 5.1.2. Genes, Chromosomes and Hereditary
- 5.1.3. Genes and Behavior

5.2. Early Brain Injury Disorder
- 5.2.1. Introduction
- 5.2.2. The Brain in Early Childhood
- 5.2.3. Pediatric Cerebral Palsy
- 5.2.4. Psychosyndromes
- 5.2.5. Learning Disorders
- 5.2.6. Neurobiological Disorders that Affect Learning

5.3. Vascular Brain Disorders
- 5.3.1. Introduction to Cerebrovascular Disorders
- 5.3.2. Most Common Types
- 5.3.3. Characteristics and Symptomology

5.4. Brain Tumors
- 5.4.1. Introduction to Brain Tumors
- 5.4.2. Most Common Types
- 5.4.3. Characteristics and Symptomology

5.5. Cranioencephalic Traumas
- 5.5.1. Introduction to Trauma
- 5.5.2. Most Common Types
- 5.5.3. Characteristics and Symptomology

5.6. Infections of the CNS
- 5.6.1. Introduction the CNS Infections
- 5.6.2. Most Common Types
- 5.6.3. Characteristics and Symptomology

5.7. Epileptic Disorders
- 5.7.1. Introduction to Epileptic Disorders
- 5.7.2. Most Common Types
- 5.7.3. Characteristics and Symptomology

5.8. Alterations in the Level of Consciousness
- 5.8.1. Introduction to Altered Levels of Consciousness
- 5.8.2. Most Common Types
- 5.8.3. Characteristics and Symptomology

5.9. Acquired Brain Injury
- 5.9.1. Concept of Acquired Brain Injury
- 5.9.2. Most Common Types
- 5.9.3. Characteristics and Symptomology

5.10. Disorders Related to Pathological Ageing
- 5.10.1. Introduction
- 5.10.2. Psychological Disorders Related to Pathological Ageing

Module 6. Aphasias, Agraphias and Alexias

6.1. Broca's Aphasia
- 6.1.1. Principles and Origin of Broca's Aphasia
- 6.1.2. Characteristics and Symptomology
- 6.1.3. Assessment and Diagnosis

6.2. Wernicke's Aphasia
- 6.2.1. Basis and Origin of Wernicke's Aphasia
- 6.2.2. Characteristics and Symptomology
- 6.2.3. Assessment and Diagnosis

6.3. Conduction Aphasia
- 6.3.1. Basis and Origin of Conduction Aphasia
- 6.3.2. Characteristics and Symptomology
- 6.3.3. Assessment and Diagnosis

6.4. Global Aphasia
- 6.4.1. Basis and Origin of Global Aphasia
- 6.4.2. Characteristics and Symptomology
- 6.4.3. Assessment and Diagnosis

6.5. Sensory Transcortical Aphasia
- 6.5.1. Principles and Origin of Broca's Aphasia
- 6.5.2. Characteristics and Symptomology
- 6.5.3. Assessment and Diagnosis

6.6. Motor Transcortical Aphasia
- 6.6.1. Basis and Origin of Motor Transcortical Aphasia
- 6.6.2. Characteristics and Symptomology
- 6.6.3. Assessment and Diagnosis

6.7. Mixed Transcortical Aphasia
- 6.7.1. Basis and Origin of Mixed Transcortical Aphasia
- 6.7.2. Characteristics and Symptomology
- 6.7.3. Assessment and Diagnosis

6.8. Anomic Aphasia
- 6.8.1. Basis and Origin of Anomic Aphasia
- 6.8.2. Characteristics and Symptomology
- 6.8.3. Assessment and Diagnosis

6.9. Agraphias
- 6.9.1. Basis and Origin of Agraphias
- 6.9.2. Characteristics and Symptomology
- 6.9.3. Assessment and Diagnosis

6.10. Alexias
- 6.10.1. Basis and Origin of Alexias
- 6.10.2. Characteristics and Symptomology
- 6.10.3. Assessment and Diagnosis

Module 7. Cognitive Deficiencies

7.1. Attention Pathology
- 7.1.1. Main Attention Pathologies
- 7.1.2. Characteristics and Symptomology
- 7.1.3. Assessment and Diagnosis

7.2. Memory Pathology
- 7.2.1. Main Memory Pathologies
- 7.2.2. Characteristics and Symptomology
- 7.2.3. Assessment and Diagnosis

7.3. Dysexecutive Syndrome
- 7.3.1. What is Dysexecutive Syndrome?
- 7.3.2. Characteristics and Symptomology
- 7.3.3. Assessment and Diagnosis

7.4. Apraxias I
- 7.4.1. Concept of Apraxia
- 7.4.2. Main Modalities
  - 7.4.2.1. Ideomotor Apraxia
  - 7.4.2.2. Ideational Apraxia
  - 7.4.2.3. Constructional Apraxia
  - 7.4.2.4. Clothing Apraxia

7.5. Apraxias II
- 7.5.1. Gait Apraxia
- 7.5.2. Apaxia of Speech or Phonation
- 7.5.3. Optical Apraxia
- 7.5.4. Callosal Apraxia
- 7.5.5. Examination of the Apraxias:
  - 7.5.5.1. Neuropsychological Assessment
  - 7.5.5.2. Cognitive Rehabilitation

7.6. Agnosias I
- 7.6.1. Concept of Agnosias
- 7.6.2. Visual Agnosias
  - 7.6.2.1. Agnosia for Objects
  - 7.6.2.2. Simultanagnosia
  - 7.6.2.3. Prosopagnosia
  - 7.6.2.4. Chromatic Agnosia
  - 7.6.2.5. Others
- 7.6.3. Auditory Agnosia
  - 7.6.3.1. Amusia
  - 7.6.3.2. Agnosia for Sounds
  - 7.6.3.3. Verbal Agnosia
- 7.6.4. Somatosensory Agnosia
  - 7.6.4.1. Asteroganosia
  - 7.6.4.2. Tactile Agnosia

7.7. Agnosia II
- 7.7.1. Olfactory Agnosia
- 7.7.2. Agnosia in Diseases
  - 7.7.2.1. Anosognosia
  - 7.7.2.2. Asomatognosia
- 7.7.3. Assessment of Agnosia
- 7.7.4. Cognitive Rehabilitation

7.8. Social Cognition Deficit
- 7.8.1. Introduction to Social Cognition
- 7.8.2. Characteristics and Symptomology
- 7.8.3. Assessment and Diagnosis

7.9. Autism Spectrum Disorders
- 7.9.1. Introduction
- 7.9.2. ASD Diagnosis
- 7.9.3. Cognitive and Neuropsychological Profile Associated with ASD

Module 8. Neurodegenerative Diseases

8.1. Normal Aging
- 8.1.1. Basic Cognitive Processes in Normal Aging
- 8.1.2. Superior Cognitive Processes in Normal Aging
- 8.1.3. Attention and Memory in Elderly People with Normal Aging

8.2. Cognitive Reserve and its Importance in Aging
- 8.2.1. Cognitive Reserve: Definition and Basic Concepts
- 8.2.2. Functionality of Cognitive Reserve
- 8.2.3. Influencing Variables in Cognitive Reserve
- 8.2.4. Interventions Based on Improving Cognitive Reserve in the Elderly

8.3. Multiple Sclerosis
- 8.3.1. Concepts and Biological Foundations of Multiple Sclerosis
- 8.3.2. Characteristics and Symptomology
- 8.3.3. Patient Profile
- 8.3.4. Assessment and Diagnosis

8.4. Amyotrophic Lateral Sclerosis
- 8.4.1. Concepts and Biological Foundations of Amyotrophic Lateral Sclerosis (ALS)
- 8.4.2. Characteristics and Symptomology
- 8.4.3. Patient Profile
- 8.4.4. Assessment and Diagnosis

8.5. Parkinson's Disease
- 8.5.1. Concepts and Biological Foundations of Parkinson's Disease
- 8.5.2. Characteristics and Symptomology
- 8.5.3. Patient Profile
- 8.5.4. Assessment and Diagnosis

8.6. Huntington's Disease
- 8.6.1. Concepts and Biological Foundations of Huntington's Disease
- 8.6.2. Characteristics and Symptomology
- 8.6.3. Patient Profile
- 8.6.4. Assessment and Diagnosis

8.7. Dementia of the Alzheimer Type
- 8.7.1. Concepts and Biological Foundations of Dementia of the Alzheimer Type
- 8.7.2. Characteristics and Symptomology
- 8.7.3. Patient Profile
- 8.7.4. Assessment and Diagnosis

8.8. Pick's Dementia
- 8.8.1. Concepts and Biological Foundations of Pick's Dementia
- 8.8.2. Characteristics and Symptomology
- 8.8.3. Patient Profile
- 8.8.4. Assessment and Diagnosis

8.9. Lewy Body Dementia
- 8.9.1. Concepts and Biological Foundations of Lewy Body Dementia
- 8.9.2. Characteristics and Symptomology
- 8.9.3. Patient Profile
- 8.9.4. Assessment and Diagnosis

8.10. Vascular Dementia
- 8.10.1. Concepts and Biological Foundations of Vascular Dementia
- 8.10.2. Characteristics and Symptomology
- 8.10.3. Patient Profile
- 8.10.4. Assessment and Diagnosis

Module 9. Neuropsychological Assessment and Rehabilitation

9.1. Assessment of Attention and Memory
- 9.1.1. Introduction to the Assessment of Attention and Memory
- 9.1.2. Main Instruments

9.2. Language Assessment
- 9.2.1. Introduction to the Assessment of Language
- 9.2.2. Main Instruments

9.3. Executive Functions Assessment
- 9.3.1. Introduction to the Assessment of Executive Functions
- 9.3.2. Main Instruments

9.4. Assessment of Apraxia and Agnosia
- 9.4.1. Introduction to the Assessment of Apraxia and Agnosia
- 9.4.2. Main Instruments

9.5. Variables that Intervene in the Recovery of a Patient
- 9.5.1. Risk Factors
- 9.5.2. Protective Factors

9.6. Strategies: Restoration, Compensation and Mixed Strategies
- 9.6.1. Restoration Strategies
- 9.6.2. Compensation Strategies
- 9.6.3. Mixed Strategies

9.7. Rehabilitation of Attention, Memory, Executive Functions and Agnosia
- 9.7.1. Rehabilitation of Attention
- 9.7.2. Rehabilitation of Memory
- 9.7.3. Rehabilitation of Executive Functions
- 9.7.4. Rehabilitation of Agnosia

9.8. Adapting to the Environment and External Support
- 9.8.1. Adapting the Environment to Meet the Constraints
- 9.8.2. How to Help the Patient in an External Way?

9.9. *Biofeedback* Techniques as Intervention
- 9.9.1. *Biofeedback*: Definition and Basic Concepts
- 9.9.2. Techniques that Use *Biofeedback*
- 9.9.3. *Biofeedback* as an Intervention Method in Health Psychology
- 9.9.4. Evidence on the Use of *Biofeedback* in the Treatment of Certain Disorders

9.10. Transcranial Magnetic Stimulation (TMS) as an Intervention
- 9.10.1. Transcranial Magnetic Stimulation: Definition and Basic Concepts
- 9.10.2. Functional Areas Considered Therapeutic Targets of Transcranial Magnetic Stimulation
- 9.10.3. Results of Intervention through TMS in Health Psychology

Module 10. Pharmacological Treatment

10.1. Introduction to Psychopharmacology
- 10.1.1. Principles and Introduction to Psychopharmacology
- 10.1.2. General Principles of Psychopharmacological Treatment
- 10.1.3. Main Applications

10.2. Antidepressants
- 10.2.1. Introduction
- 10.2.2. Types of Antidepressants
- 10.2.3. Mechanism of Action
- 10.2.4. Indications
- 10.2.5. Drug Groups
- 10.2.6. Dosage and Forms of Administration
- 10.2.7. Side Effects
- 10.2.8. Contraindications
- 10.2.9. Drug Interactions
- 10.2.10. Patient Information

10.3. Antipsychotics
- 10.3.1. Introduction
- 10.3.2. Types of Antipsychotics
- 10.3.3. Mechanism of Action
- 10.3.4. Indications
- 10.3.5. Drug Groups
- 10.3.6. Dosage and Forms of Administration
- 10.3.7. Side Effects
- 10.3.8. Contraindications
- 10.3.9. Drug Interactions
- 10.3.10. Patient Information

10.4. Anxiolytics and Hypnotics
- 10.4.1. Introduction
- 10.4.2. Types of Anxiolytics and Hypnotics
- 10.4.3. Mechanism of Action
- 10.4.4. Indications
- 10.4.5. Drug Groups
- 10.4.6. Dosage and Forms of Administration
- 10.4.7. Side Effects
- 10.4.8. Contraindications
- 10.4.9. Drug Interactions
- 10.4.10. Patient Information

10.5. Mood Stabilizers
- 10.5.1. Introduction
- 10.5.2. Types of Mood Stabilizers
- 10.5.3. Mechanism of Action
- 10.5.4. Indications
- 10.5.5. Drug Groups
- 10.5.6. Dosage and Forms of Administration
- 10.5.7. Side Effects
- 10.5.8. Contraindications
- 10.5.9. Drug Interactions
- 10.5.10. Patient Information

10.6. Psychostimulants
- 10.6.1. Introduction
- 10.6.2. Mechanism of Action
- 10.6.3. Indications
- 10.6.4. Drug Groups
- 10.6.5. Dosage and Forms of Administration
- 10.6.6. Side Effects
- 10.6.7. Contraindications
- 10.6.8. Drug Interactions
- 10.6.9. Patient Information

10.7. Anti-Dementia Drugs
- 10.7.1. Introduction
- 10.7.2. Mechanism of Action
- 10.7.3. Indications
- 10.7.4. Drug Groups
- 10.7.5. Dosage and Forms of Administration
- 10.7.6. Side Effects
- 10.7.7. Contraindications
- 10.7.8. Drug Interactions
- 10.7.9. Patient Information

10.8. Drugs for the Treatment of Dependency
- 10.8.1. Introduction
- 10.8.2. Types and Mechanism of Action
- 10.8.3. Indications
- 10.8.4. Drug Groups
- 10.8.5. Dosage and Forms of Administration
- 10.8.6. Side Effects
- 10.8.7. Contraindications
- 10.8.8. Drug Interactions
- 10.8.9. Patient Information

10.9. Anti-Epileptic Drugs
- 10.9.1. Introduction
- 10.9.2. Mechanism of Action
- 10.9.3. Indications
- 10.9.4. Drug Groups
- 10.9.5. Dosage and Forms of Administration
- 10.9.6. Side Effects
- 10.9.7. Contraindications
- 10.9.8. Drug Interactions
- 10.9.9. Patient Information

10.10. Other Drugs: Guanfacine
- 10.10.1. Introduction
- 10.10.2. Mechanism of Action
- 10.10.3. Indications
- 10.10.4. Dosage and Forms of Administration
- 10.10.5. Side Effects
- 10.10.6. Contraindications
- 10.10.7. Drug Interactions
- 10.10.8. Patient Information

Among the skills you will acquire in this program is the use of the best restorative and reparative strategies in the evaluation and rehabilitation of the neuropsychological patient"

06

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

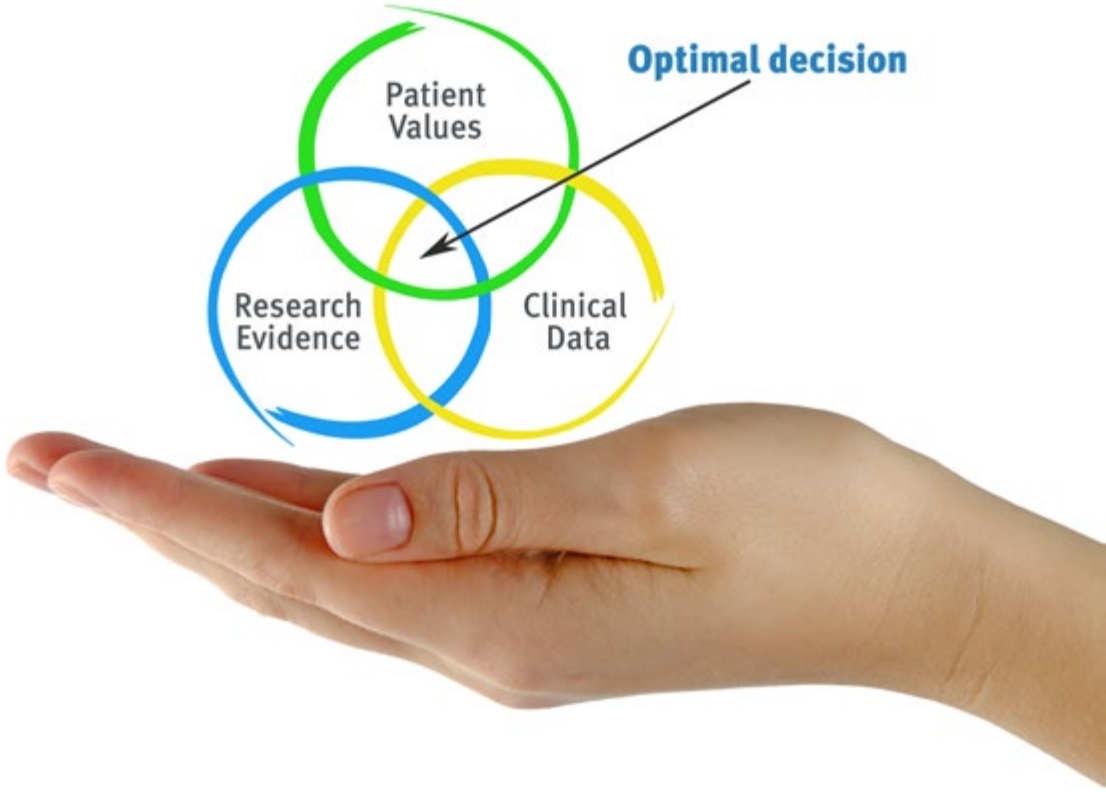
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

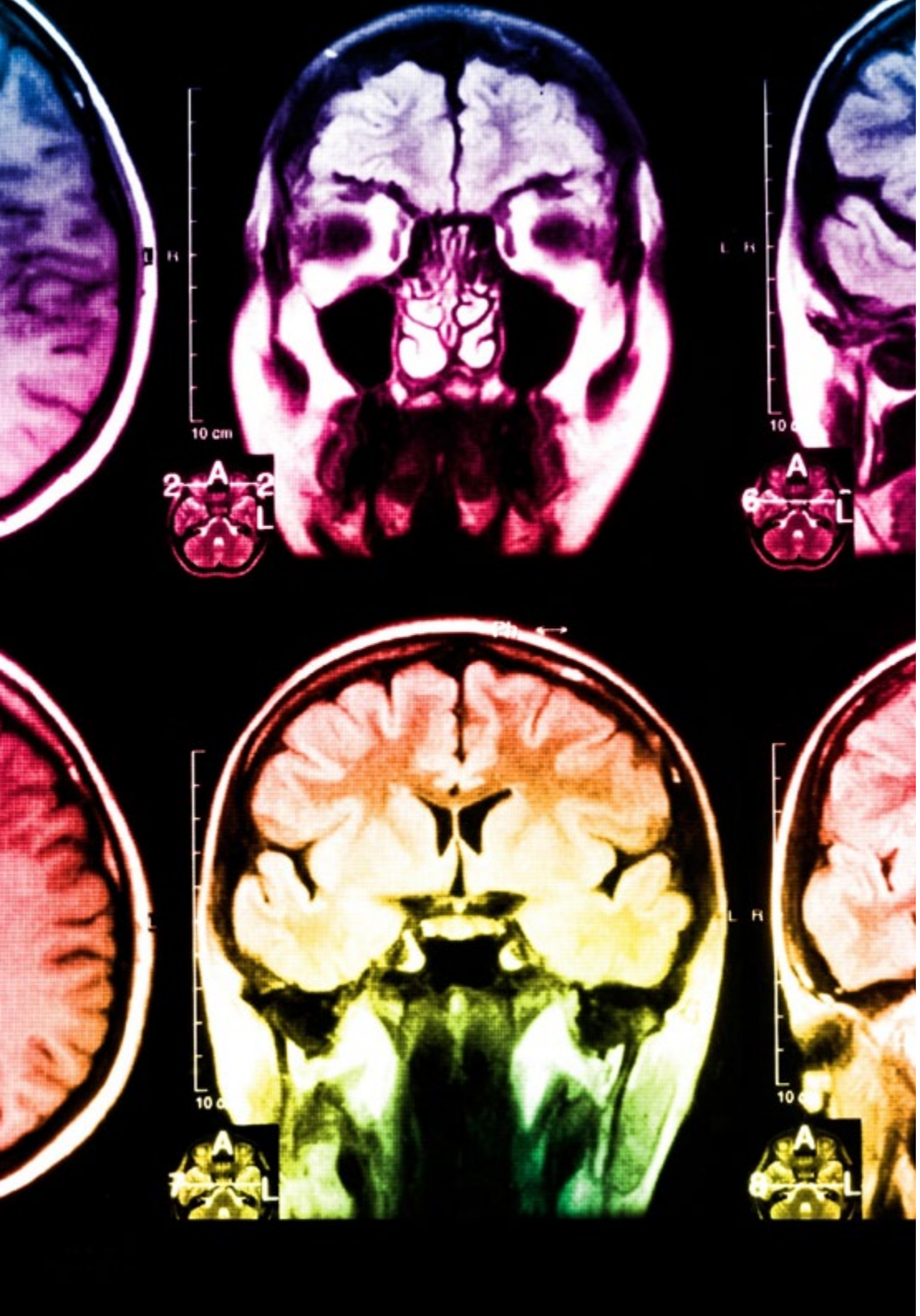
1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.

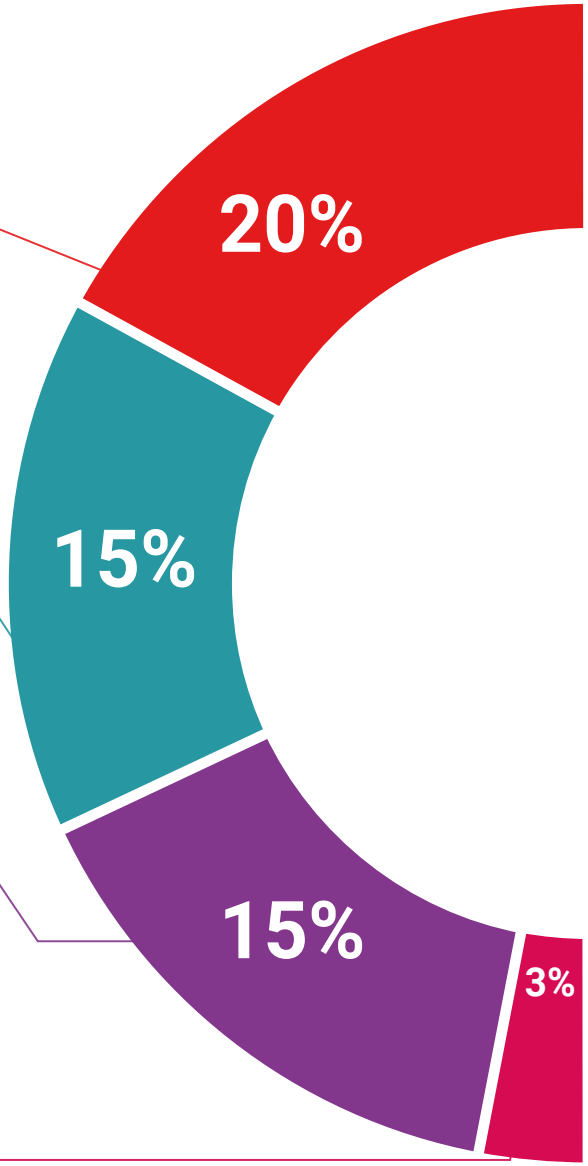
Interactive Summaries

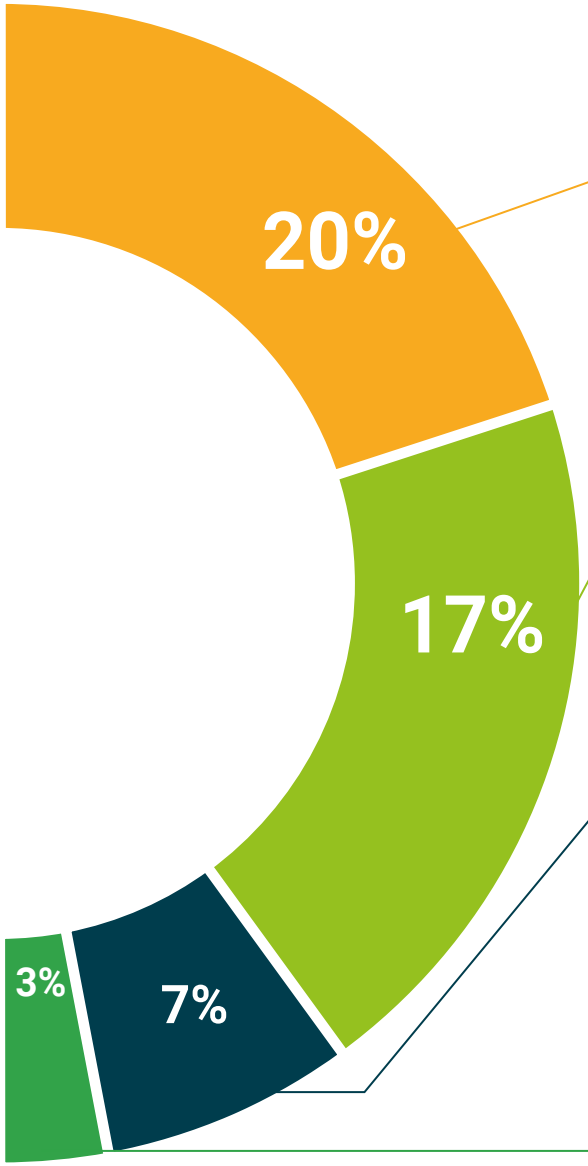
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

07

Certificate

The Professional Master's Degree in Clinical Neuropsychology guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This **Professional Master's Degree in Clinical Neuropsychology** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Clinical Neuropsychology**

Official N° of hours: **1,500 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

PROFESSIONAL MASTER'S DEGREE

in

Clinical Neuropsychology

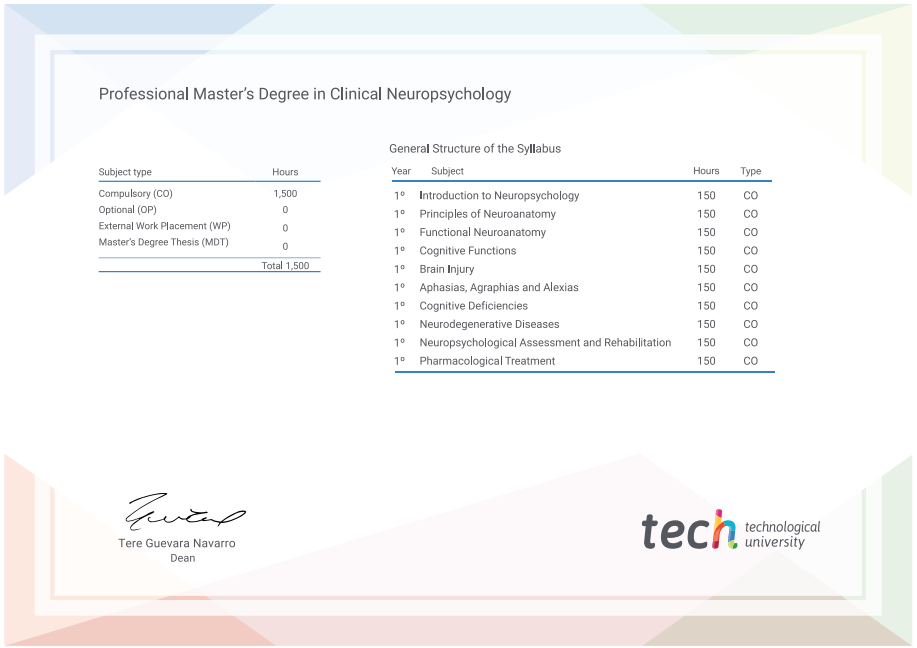
This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates


Professional Master's Degree in Clinical Neuropsychology

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 1,500

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	Introduction to Neuropsychology	150	CO
1º	Principles of Neuroanatomy	150	CO
1º	Functional Neuroanatomy	150	CO
1º	Cognitive Functions	150	CO
1º	Brain Injury	150	CO
1º	Aphasias, Agraphias and Alexias	150	CO
1º	Cognitive Deficiencies	150	CO
1º	Neurodegenerative Diseases	150	CO
1º	Neuropsychological Assessment and Rehabilitation	150	CO
1º	Pharmacological Treatment	150	CO

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Dean

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*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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Professional Master's Degree

Clinical Neuropsychology

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Professional Master's Degree

Clinical Neuropsychology

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