Postgraduate Diploma

Neuropsychology and Diagnosis of Oral Language and Speech

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Postgraduate Diploma

Neuropsychology and Diagnosis of Oral Language and Speech

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-neuropsychology-diagnosis-oral-language-speech

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01

Introduction to the Program

Oral Language and Speech Disorders are complex conditions that can arise from a variety of causes, from brain injuries to degenerative neurological conditions. In view of this, the Neuropsychology of Language plays a fundamental role in the identification and treatment of these disorders, allowing physicians to offer a more effective therapeutic approach. In this context, specialists need to incorporate the latest innovations in the diagnosis of these conditions into their practice in order to optimize patients' quality of life. With the aim of facilitating this work, TECH is has developed a revolutionary university program focused on Neuropsychology and Diagnosis of Oral Language and Speech. And all under a flexible 100% online modality!

Through this completely online Postgraduate Diploma, you will design treatment plans adapted to the specific needs of people with Language and Speech Disorders to improve their general well-being"

According to a new study conducted by the World Health Organization, oral language and speech disorders affect approximately 6% of the global population. These conditions, which range from dysarthria to aphasia, are often the result of brain injuries or neurodegenerative diseases. This highlights the importance of healthcare professionals having in-depth knowledge of the brain mechanisms and neuropsychological processes underlying these pathologies.

In this context, TECH introduces a cutting-edge Postgraduate Diploma in Neuropsychology and Diagnosis of Oral Language and Speech. Designed by renowned specialists in the field, the academic program delves into topics that range from the foundations of neural plasticity and advanced rehabilitation techniques based on brain stimulation, to the development of therapies for language restoration. As a result, graduates will be able to design and implement personalized therapeutic plans that promote the rehabilitation and restoration of language, significantly contributing to the improvement of patients' quality of life.

It is worth noting that this university program is based on TECH's ground-breaking Relearning methodology, which uses the repetition of key concepts to reinforce knowledge in a natural and progressive way. In this way, the combination of flexibility and a robust pedagogical approach makes it highly accessible. Furthermore, as it is delivered completely online, physicians will be free to plan their schedules individually. In this sense, the only thing specialists will need is an electronic device with an Internet connection to enter the Virtual Campus. There they will find a library full of additional multimedia resources such as explanatory videos, specialized readings, or interactive summaries.

This **Postgraduate Diploma in Neuropsychology and Diagnosis of Oral Language and Speech** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- The development of case studies presented by experts in Neuropsychology and Diagnosis of Oral Language and Speech
- 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 the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies in medical practice
- 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

You will be able to carry out differential diagnoses on conditions such as Aphasia, Dysarthria and Apraxia"

You will lead rigorous clinical research that contributes to the development of new diagnostic techniques for addressing Language and Speech Disorders"

You will develop an ethical and sensitive practice for dealing with patients who present Language Disorders, guaranteeing the quality of care.

Take this university program to update your knowledge at your own pace and without time constraints thanks to the Relearning system that TECH puts at your disposal.

The teaching staff includes professionals from the fields of Neuropsychology and the Diagnosis of Oral Language and Speech, who bring their work experience to the 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 an immersive learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.

Study at the largest online university in the world and ensure your professional success. The future begins at TECH"

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.

Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.

02

Syllabus

The teaching content that forms part of this University Expert course has been put together by true experts in Neuropsychology and the Diagnosis of Oral Language and Speech. Thanks to this, the syllabus will delve into issues ranging from the most innovative assessment techniques for identifying disorders or speech therapy strategies for the treatment of communication disorders to the implementation of brain plasticity therapies. Graduates will therefore develop a solid ability to apply advanced clinical approaches, including the integration of neuropsychological and speech therapy, tailored to the individual needs of each patient.

You will make clinical decisions based on best practices based on scientific evidence in the field of Language Neuropsychology”

Module 1. Neuropsychology of Language

1.1. Neuropsychology and Speech Therapy
- 1.1.1. Basic Concepts
  - 1.1.1.1. Definition of Neuropsychology
  - 1.1.1.2. Relationship between Neuropsychology and Speech Therapy
  - 1.1.1.3. Cognitive Functions and their Relationship with Language
- 1.1.2. Assessment Methodologies
  - 1.1.2.1. Neuroimaging Techniques
  - 1.1.2.2. Neuropsychological Assessment of Language
- 1.1.3. Technique and Approach Route
  - 1.1.3.1. Interdisciplinary Approach to Speech Therapy
  - 1.1.3.2. Techniques for Neuropsychological Rehabilitation of Language
  - 1.1.3.3. Speech Therapy Strategies for the Treatment of Cognitive and Communicative Disorders

1.2. Neuroanatomical Bases of Language
- 1.2.1. Brain Structures Involved
  - 1.2.1.1. Broca's and Wernicke's Areas
  - 1.2.1.2. Angular Gyrus and its Role in Reading
  - 1.2.1.3. Temporal Lobe and Its Relationship with Comprehension
- 1.2.2. Brain Connections
  - 1.2.2.1. Arcuate Fasciculus
  - 1.2.2.2. Interhemispheric Connections
- 1.2.3. Left vs. Right Brain in Language
  - 1.2.3.1. Hemispheric Dominance
  - 1.2.3.2. Function of the Right Hemisphere in Non-verbal Language

1.3. Neurocognitive Processes of Language
- 1.3.1. Language Comprehension
  - 1.3.1.1. Phonological and Lexical Decoding
  - 1.3.1.2. Semantic and Pragmatic Comprehension
- 1.3.2. Language Production
  - 1.3.2.1. Phonological Processing
  - 1.3.2.2. Lexical, Syntactic and Semantic Processing
- 1.3.3. Memory and Language
  - 1.3.3.1. Verbal Working Memory
  - 1.3.3.2. Long-Term Memory and Language

1.4. Neuronal Plasticity and Language
- 1.4.1. Concept of Brain Plasticity
  - 1.4.1.1. Definition and Types of Brain Plasticity
  - 1.4.1.2. Factors Influencing Brain Plasticity
- 1.4.2. Mechanisms of Neuronal Plasticity
  - 1.4.2.1. Synaptic Plasticity and its Role in Learning
  - 1.4.2.2. Neurogenesis and its Implication in Brain Repair
- 1.4.3. Impact of Plasticity on Language Recovery
  - 1.4.3.1. Adaptation Mechanisms in Language Disorders
  - 1.4.3.2. Cortical Plasticity in Language Restructuring
- 1.4.4. Age and Plasticity
  - 1.4.4.1. Effects of Early Age on Neuronal Plasticity
  - 1.4.4.2. Plasticity in Adulthood and its Relationship with Language Learning
- 1.4.5. Brain Rehabilitation and Stimulation
  - 1.4.5.1. Brain Stimulation Techniques for Language Rehabilitation
  - 1.4.5.2. Speech Therapies and their Impact on Neuronal Plasticity

1.5. Neurobiological Language Disorders in Children
- 1.5.1. Speech Disorders
  - 1.5.1.1. Speech Disorders
  - 1.5.1.2. Childhood Apraxia
  - 1.5.1.3. Childhood Dysarthria
- 1.5.2. Language Disorders
  - 1.5.2.1. Specific Language Disorder (SLD)
  - 1.5.2.2. Developmental Language Disorder
  - 1.5.2.3. Simple Language Delay

1.5.3. Related Disorders and Neurodevelopmental Disorders
1.5.3.1. Acquired Childhood Aphasia
1.5.3.2. Autism Spectrum Disorder
1.5.3.3. Down Syndrome
1.5.3.4. Cerebral Palsy
1.6. Neuropsychological Assessment of Language in Children
1.6.1. Assessment Techniques
1.6.1.1. Standardized Tests
1.6.1.2. Clinical and Observational Assessment
1.6.2. Specific Neuropsychological Instruments
1.6.2.1. Verbal Fluency Assessment
1.6.2.2. Language Development Scales
1.6.3. Interpretation of Results
1.6.3.1. Analysis of Language Skills
1.6.3.2. Identification of Disorders and Comorbidities
1.7. Neuropsychological Rehabilitation in Children
1.7.1. Early Intervention
1.7.1.1. Language Therapy
1.7.1.2. Early Stimulation Approaches
1.7.2. Specific Therapeutic Approaches
1.7.2.1. Therapies Based on Games
1.7.2.2. Cognitive-Behavioral Therapy for Language
1.7.3. Rehabilitation Techniques
1.7.3.1. Brain Plasticity Therapies
1.7.3.2. Language Rehabilitation Using Technology
1.8. Neurobiological Language Disorders in Adults
1.8.1. Aphasia
1.8.1.1. Broca's Aphasia
1.8.1.2. Wernicke's Aphasia
1.8.1.3. Global Aphasia
1.8.2. Disorders Related to Acquired Brain Injury
1.8.2.1. Dysarthria
1.8.2.2. Speech Apraxias
1.8.3. Neurodegenerative Disorders
1.8.3.1. Alzheimer's Disease and Language
1.8.3.2. Language Disorders in Amyotrophic Lateral Sclerosis (ALS)
1.8.3.3. Language Disorders in Parkinson's Disease
1.9. Neuropsychological Assessment of Language in Adults
1.9.1. Neuropsychological Tests in Adults
1.9.1.1. Assessment of Aphasias
1.9.1.2. Assessment of Cognitive and Linguistic Disorders
1.9.2. Diagnostic Methods
1.9.2.1. Clinical Interviews and Medical History
1.9.2.2. Functional Assessment Scales
1.9.3. Interpretation of Results in Adults
1.9.3.1. Assessment of Verbal Disfluency
1.9.3.2. Differentiation between Aphasia and Dementia
1.10. Neuropsychological Rehabilitation in Adults
1.10.1. Rehabilitation after a Cerebrovascular Accident (CVA)
1.10.1.1. Post-CVA Speech Therapy
1.10.1.2. Approaches Based on Neuroplasticity
1.10.2. Rehabilitation in Neurodegenerative Diseases
1.10.2.1. Intervention Approaches in Alzheimer's Disease
1.10.2.2. Language Rehabilitation in Amyotrophic Lateral Sclerosis (ALS)
1.10.3. Emerging Therapies
1.10.3.1. Cognitive-Behavioral Therapy in Aphasia
1.10.3.2. Use of Technologie for Language Rehabilitation

Module 2. Speech and Language Assessment and Diagnosis

2.1. Basic Concepts of Assessment and Diagnosis
- 2.1.1. Introduction and Objectives
  - 2.1.1.1. Definition of Assessment and Diagnostics in Speech Therapy
  - 2.1.1.2. Purpose of Assessment in the Field of Speech Therapy
- 2.1.2. Why Assess?
  - 2.1.2.1. Identification of Language Disorders
  - 2.1.2.2. Planning of Therapeutic Intervention
  - 2.1.2.3. Monitoring of Progress and Adjustment of Strategies
- 2.1.3. What to Assess?
  - 2.1.3.1. Oral Language Assessment
  - 2.1.3.2. Reading and Writing Assessment
  - 2.1.3.3. Assessment of Pragmatic Skills
- 2.1.4. How Do They Assess?
  - 2.1.4.1. Qualitative and Quantitative Methods
  - 2.1.4.2. Observation Techniques and Standardized Tests
  - 2.1.4.3. Assessment of Results and Decision Making
- 2.1.5. The Evolution of Speech-Language Disorder Assessment
  - 2.1.5.1. History of Speech-Language Disorder Assessment
  - 2.1.5.2. Advances in Diagnostic Tools and Approaches
  - 2.1.5.3. Current Trends in Speech and Language Therapy Assessment

2.2. Recording Tools for Language Assessment
- 2.2.1. Introduction and Objectives
  - 2.2.1.1. Importance of Recording Tools
  - 2.2.1.2. Diagnostic Function of Tools in Speech Therapy
- 2.2.2. The Clinical Interview
  - 2.2.2.1. Interview Techniques in Speech Therapy
  - 2.2.2.2. The Role of Parents, Educators and Other Involved Parties
  - 2.2.2.3. Key Questions to Obtain Relevant Information
- 2.2.3. Language Observation and Recording
  - 2.2.3.1. Methods for Observing Language in Different Contexts
  - 2.2.3.2. Tools for the Precise Recording of Language
  - 2.2.3.3. Aspects to be Assessed: Fluency, Articulation, Tone, etc.
- 2.2.4. Standardized Tests for the Assessment of the Phonetic-Phonological Component
  - 2.2.4.1. Tools for the Assessment of Articulation and Sounds
  - 2.2.4.2. Tests to Assess Auditory Perception and Discrimination
- 2.2.5. Standardized Tests for the Assessment of the Morphosyntactic Component
  - 2.2.5.1. Assessment of Grammatical Structure
  - 2.2.5.2. Sentence Analysis and Morphology
  - 2.2.5.3. Tools for Syntax and its Assessment
- 2.2.6. Standardized Tests to Assess the Lexical-Semantic Component
  - 2.2.6.1. Vocabulary and Word Comprehension Tests
  - 2.2.6.2. Assessment of Semantics and Word Meaning
  - 2.2.6.3. Lexical Development Measurement Tools
- 2.2.7. Standardized Tests to Assess the Pragmatic Component
  - 2.2.7.1. Assessment of Language Use in Social Contexts
  - 2.2.7.2. Tools for Measuring Communicative Competence
  - 2.2.7.3. Assessment of Coherence and Relevance of Interactions
- 2.2.8. Standardized Batteries for Assessing Oral Language
  - 2.2.8.1. Comprehensive Tests for Assessing Various Aspects of Oral Language
  - 2.2.8.2. Assessment of Fluency and Coherence of Speech
- 2.2.9. Standardized Tests to Assess Literacy
  - 2.2.9.1. Assessment of Word Decoding and Reading Aloud
  - 2.2.9.2. Reading Comprehension Assessment
  - 2.2.9.3. Writing Tests and Analysis
- 2.2.10 Other Assessment Tests
  - 2.2.10.1. Additional Cognitive Development Tests
  - 2.2.10.2. Assessment of Other Skills Affecting Language

2.3. Assessment of Speech Sound Disorders (SSDs)
- 2.3.1. Characteristics and Types of Speech Sound Disorders
  - 2.3.1.1. Importance of Assessing SSDs in Speech Therapy Diagnosis
- 2.3.2. Assessment of Articulation
  - 2.3.2.1. Methods for Assessing Sound Accuracy
  - 2.3.2.2. Specific Tests for Articulation Disorders
  - 2.3.2.3. Relationship between Articulation and Other Linguistic Disorders

2.3.3. Orofacial Examination
2.3.3.1. Orofacial Motor Function Assessment
2.3.3.2. Muscle Analysis and its Relationship with Speech Disorders
2.3.3.3. Orofacial Examination Techniques
2.3.4. Assessment of Auditory Discrimination
2.3.4.1. Tools for Measuring the Ability to Discriminate Sounds
2.3.4.2. The importance of Auditory Discrimination in Speech
2.3.4.3. Assessment of Auditory Perception in Children and Adults
2.3.5. Assessment of Phonological Awareness
2.3.5.1. Assessment of the Ability to Manipulate and Distinguish Sounds
2.3.5.2. Relationship between Phonological Awareness and Reading/Writing
2.3.5.3. Specific Tests to Assess Phonological Awareness

2.4. Assessment of Acquired Neurological Disorders and Neurodegenerative Diseases
2.4.1. Characteristics of Acquired Neurological Disorders
2.4.1.1. Impact of Brain Lesions on Language
2.4.1.2. Impact of Brain Lesions on Speech
2.4.2. Assessment of Oral Production
2.4.2.1. Methods for Assessing Oral Expression in Neurological Patients
2.4.2.2. Tests for Assessing Speech in Adults
2.4.3. Assessment of Oral Comprehension
2.4.3.1. Tools for Assessing Comprehension of Oral Messages
2.4.3.2. Assessment of Difficulties in Auditory Processing
2.4.4. Assessment of Reading (Written Comprehension)
2.4.4.1. Methods for Assessing Comprehension of Written Texts
2.4.4.2. Assessment of Reading Comprehension Difficulties in Neurological Patients
2.4.5. Assessment of Writing (Written Expression)
2.4.5.1. Assessment of the Ability to Write Coherent Texts
2.4.5.2. Tools for Assessing Writing-Related Disorders
2.4.6. Screening Tests
2.4.6.1. Rapid Tests for Neurological Disorders
2.4.6.2. Importance of Screening for Early Intervention

2.5. Assessment of Neurodevelopmental Disorders and Sociocultural Deprivation Disorders
2.5.1. Characteristics of Language Development Disorders
2.5.1.1. Neurodevelopmental and Language Disorders
2.5.1.2. Impact of Sociocultural Deprivation on Language Development
2.5.2. Assessment of Language Reception
2.5.2.1. Assessment of Spoken Language Comprehension
2.5.2.2. Tools for Measuring Language Perception
2.5.3. Assessment of Language Expression
2.5.3.1. Methods for Assessing Verbal Production in Children and Adolescents
2.5.3.2. Oral and Written Expression Tests in Neurodevelopmental Disorders
2.5.3.3. Speech Assessment in Children and Adolescents

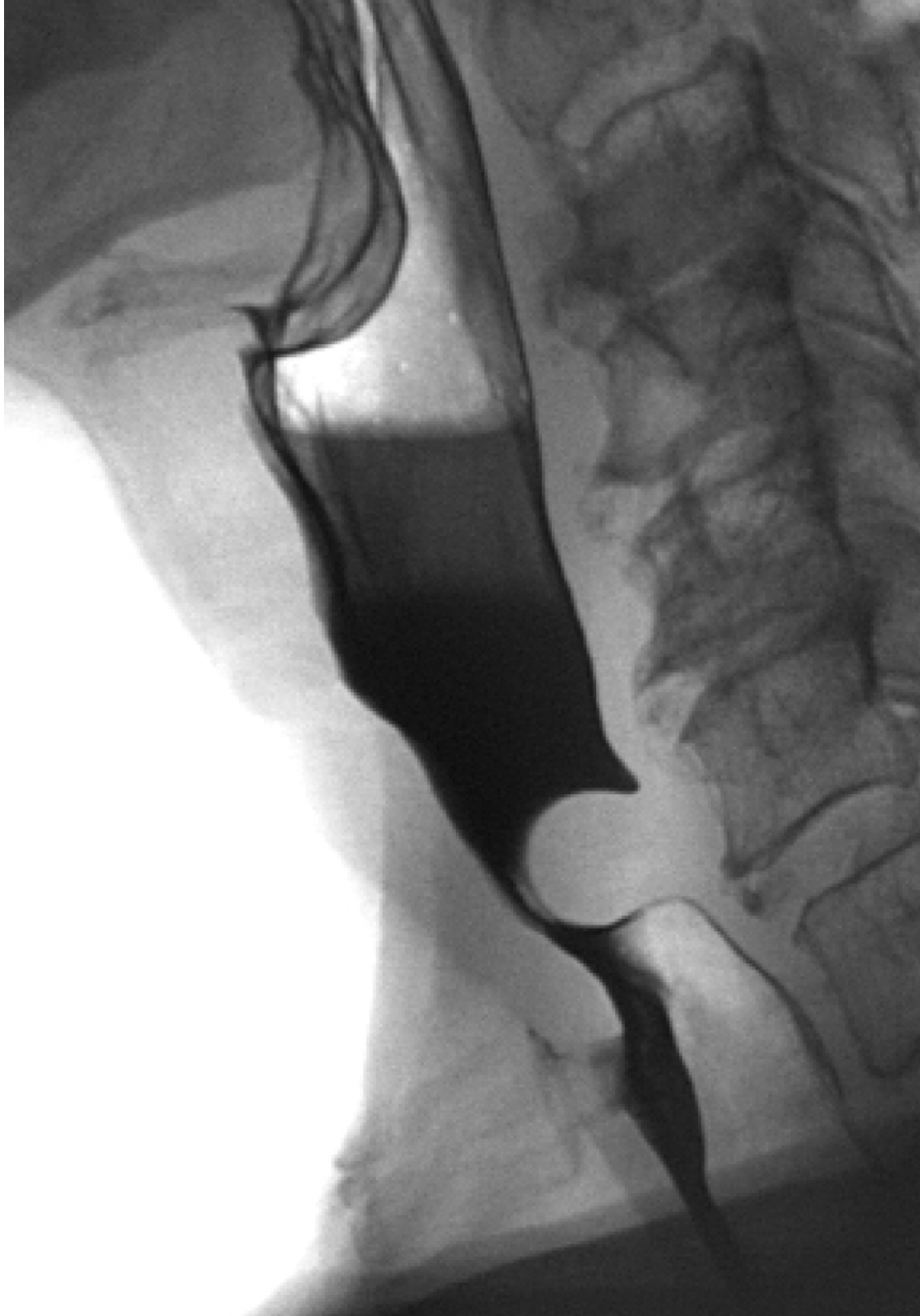
2.6. Elaboration of Speech Therapy Report for the Assessment of Oral Language
2.6.1. Speech Therapy Report
2.6.1.1. Importance of the Speech Therapy Report in the Intervention Process
2.6.1.2. Objectives of the Report in Diagnosis and Treatment
2.6.2. Why Is a Report Necessary?
2.6.2.1. Role of the Report in the Monitoring and Adjustment of Therapy
2.6.2.2. Communication of Results to Other Professionals and Family
2.6.3. Parts of an Assessment Report
2.6.3.1. Structure of the Report: Background, Diagnosis, Recommendations
2.6.3.2. Clear and Objective Writing of the Report
2.6.4. Report Models
2.6.4.1. Examples of Speech Therapy Reports in Different Contexts
2.6.4.2. Comparison of Different Approaches and Report Templates

2.7. Reading Assessment
2.7.1. The Reading Assessment Process
2.7.1.1. Reading Assessment for Children with Learning Difficulties
2.7.1.2. Objects of Reading Assessment
2.7.2. Assessment of Letter Identification
2.7.2.1. Methods for Assessing Letter and Sound Recognition
2.7.2.2. Tools for Measuring Phonological Skills

2.7.3. Assessment of Lexical Processing
2.7.3.1. Assessment of Word Recognition and Access
2.7.3.2. Tools for Measuring Vocabulary and its Use
2.7.4. Assessment of Syntactic Processing
2.7.4.1. Assessment of Comprehension of Grammatical Structures in Reading
2.7.4.2. Methods for Measuring Syntax in Written Texts
2.7.5. Semantic Processing Assessment
2.7.5.1. Tools for Measuring Meaning Comprehension
2.7.5.2. Inference and Reading Comprehension Assessment

2.8. Writing Assessment
2.8.1. The Writing Assessment Process
2.8.1.1. Writing Assessment in Children with Learning Difficulties
2.8.1.2. Objectives of Writing Assessment
2.8.2. Message Planning Assessment
2.8.2.1. Methods for Assessing the Organization and Structure of the Written Message
2.8.2.2. Tools for Measuring Writing Coherence
2.8.3. Assessment of Syntactic Processes
2.8.3.1. Assessment of Syntax in Written Production
2.8.3.2. Tools for Measuring Grammar and Sentence Complexity
2.8.4. Assessment of Motor Processes
2.8.4.1. Assessment of Motor Coordination for Writing
2.8.4.2. Methods for Assessing Fine Motor Skills and their Impact on Writing

2.9. Language Assessment in Learning Difficulties in Mathematics
2.9.1. Mathematics and Language
2.9.1.1. Relationship between Language and Mathematics in Learning
2.9.1.2. Objectives of Assessment in the Mathematical Context
2.9.2. Assessment of Counting and Numeration
2.9.2.1. Methods for Assessing the Ability to Count and Identify Numbers
2.9.2.2. Measurement Tools for Quantity Identification



2.9.3. Assessment of Coding and Comprehension of the Numerical System
2.9.3.1. Assessment of the Ability to Represent and Manipulate Numbers
2.9.3.2. Tools for Measuring Comprehension of Numeration
2.9.4. Assessment of Arithmetic Knowledge and Problem Understanding
2.9.4.1. Methods for Assessing Arithmetic Skills
2.9.4.2. Assessment of Mathematical Problem-Solving Skills
2.10. Assessment of Language Disorders in Childhood and Adolescence
2.10.1. Introduction and Objectives
2.10.1.1. Characteristics of Language Disorders in Childhood and Adolescence
2.10.1.2. Importance of Early Detection
2.10.2. Identification of Language Disorders in Childhood
2.10.2.1. Early Signs of Language Difficulties
2.10.2.2. Assessment of Expressive and Receptive Disorders in Childhood
2.10.3. Assessment of Language Disorders in Adolescents
2.10.3.1. Language Difficulties in Adolescents and Their Impact on Academic and Social Performance
2.10.3.2. Assessment of Language Comprehension and Expression in Adolescence
2.10.4. Specific Assessment Instruments and Methods
2.10.4.1. Use of Interviews, Standardized Tests and Direct Observation
2.10.4.2. Assessment of Cognitive, Emotional and Social Aspects
2.10.5. Early Intervention and Therapy Planning
2.10.5.1. Therapeutic Strategies for Early Intervention
2.10.5.2. Planning Speech and Language Intervention Based on Assessment Results

Module 3. Speech Disorders: Assessment and Intervention

3.1. Concept and Classification of Speech Disorders
3.1.1. Articulation and Fluency
3.1.1.1. Definition of Articulation
3.1.1.2. Factors Affecting Fluency
3.1.2. Conceptualization of Speech Disorders
3.1.2.1. Speech Disorders and their Classification
3.1.2.2. Differences between Speech Disorders and Language Disorders
3.1.3. Classification of Speech Disorders
3.1.3.1. Articulatory Disorders
3.1.3.2. Fluency Disorders
3.1.4. Incidence of Speech Disorders
3.1.4.1. Risk Factors
3.1.4.2. Prevalence in the Child Population
3.2. Speech Sound Disorders (Dyslalias)
3.2.1. Development of Phonetics and Phonology
3.2.1.1. The Role of Phonetics in Speech Production
3.2.1.2. Relationship Between Phonology and Speech Sound Disorders
3.2.2. Definition of SSD
3.2.2.1. Functionals
3.2.2.2. Organic
3.2.3. Classification of SSD
3.2.3.1. Simple
3.2.3.2. Complex
3.2.3.3. Phonetic
3.2.3.4. Phonological
3.2.3.5. Phonetic-Phonological
3.2.4. SSD Etiology
3.2.4.1. Biological Causes
3.2.4.2. Social and Environmental Causes

3.3. Assessment of Speech Sound Disorders
- 3.3.1. Diagnostic Criteria for SSD
- 3.3.2. Assessment of Articulatory Accuracy
  - 3.3.2.1. Assessment of Phonological Coherence
- 3.3.3. Phonetic Examination
  - 3.3.3.1. Identification of Articulation Errors
  - 3.3.3.2. Analysis of Sound Intensity and Duration
- 3.3.4. Phonological Examination
  - 3.3.4.1. Assessment of Phoneme Production
  - 3.3.4.2. Identification of Phonological Patterns
  - 3.3.4.3. Assessment of Phonological Discrimination
- 3.3.5. Standardized Assessment Tools for Dyslalia
  - 3.3.5.1. Articulation Tests
  - 3.3.5.2. Phonological Assessment Scales

3.4. Intervention in Speech Sound Disorders
- 3.4.1. Establishment of Therapeutic Goals
  - 3.4.1.1. Planning of Individual and Group Sessions
- 3.4.2. Activities for Intervention in Dyslalia
  - 3.4.2.1. Auditory Discrimination Exercises
  - 3.4.2.2. Practice in the Production of Specific Sounds
- 3.4.3. Resources and Materials for Intervention in Dyslalia
  - 3.4.3.1. Use of Visual and Auditory Aids
  - 3.4.3.2. Teaching Materials for the Correction of Dyslalia

3.5. Dysarthria
- 3.5.1. Neurological Bases of Speech
  - 3.5.1.1. The Central Nervous System and its Relation to Speech
  - 3.5.1.2. Neurological Disorders and their Impact on Verbal Production
- 3.5.2. Definition of Dysarthria
  - 3.5.2.1. Spastic Dysarthria
  - 3.5.2.2. Ataxic Dysarthria
- 3.5.3. Classification of Dysarthria
  - 3.5.3.1. Flaccid Dysarthria
  - 3.5.3.2. Rigid Dysarthria
- 3.5.4. Etiology of Dysarthria
  - 3.5.4.1. Acquired Brain Lesions
  - 3.5.4.2. Genetic Disorders

3.6. Assessment of Dysarthrias
- 3.6.1. Diagnostic Criteria for Dysarthria
  - 3.6.1.1. Identification of Motor Impairments
  - 3.6.1.2. Assessment of Speech Coordination and Accuracy
- 3.6.2. Neurophysiological Examination
  - 3.6.2.1. Basic Neurological Examinations
  - 3.6.2.2. Assessment of Oral Motor Function
- 3.6.3. Speech Examination
  - 3.6.3.1. Verbal Clarity Analysis
  - 3.6.3.2. Assessment of Speech Rate and Rhythm
- 3.6.4. Acoustic Examination
  - 3.6.4.1. Spectrographic Analysis
  - 3.6.4.2. Measurement of Voice Resonance

3.7. Intervention in Dysarthria
- 3.7.1. Design of the Intervention Plan
  - 3.7.1.1. Short- and Long-Term Therapeutic Objectives
  - 3.7.1.2. Planning Rehabilitation Sessions
- 3.7.2. Intervention in Speech Aspects
  - 3.7.2.1. Exercises to Improve Articulation
  - 3.7.2.2. Techniques to Improve Prosody
- 3.7.3. Technical Aids for Intervention
  - 3.7.3.1. Voice Amplification Devices
  - 3.7.3.2. Use of Assistive Technology in Communication
- 3.7.4. Augmentative and Alternative Communication
  - 3.7.4.1. Non-verbal Communication Systems
  - 3.7.4.2. Implementation of Communication Devices

3.8. Dysphemia
- 3.8.1. Definition of Dysphemia
  - 3.8.1.1. Dysphemia as a Rhythm Disorder
  - 3.8.1.2. Relationship between Dysphemia and Anxiety
- 3.8.2. Classification of Dysphemia
  - 3.8.2.1. Early-Onset Dysphemia
  - 3.8.2.2. Acquired Dysphemias
- 3.8.3. Etiology of Dysphemias
  - 3.8.3.1. Psychological Factors
  - 3.8.3.2. Biological Factors
- 3.8.4. Others Rhythm and Fluency Disorders
  - 3.8.4.1. Tachylalia and Bradylalia
  - 3.8.4.2. Non-pathological Disfluencies

3.9. Assessment of Dysphemia
- 3.9.1. Diagnostic Criteria for Dysphemia
  - 3.9.1.1. Identification of Speech Blockages
  - 3.9.1.2. Assessment of Associated Emotional Symptoms
- 3.9.2. Patient Assessment
  - 3.9.2.1. Clinical Interviews
  - 3.9.2.2. Specific Tests of Verbal Fluency
- 3.9.3. Assessment of Family Members
  - 3.9.3.1. Surveys on Family History
  - 3.9.3.2. Social and Family Impact Assessment
- 3.9.4. Assessment of Other Variables
  - 3.9.4.1. Emotional and Cognitive Assessment
  - 3.9.4.2. Analysis of Social Interaction

3.10. Intervention in Dysphemia
- 3.10.1. Design of the Intervention Plan
  - 3.10.1.1. Establishment of Communicative Goals
  - 3.10.1.2. Relaxation and Stress Control Techniques
- 3.10.2. Dysphemia Intervention Techniques
  - 3.10.2.1. Fluency Therapy
  - 3.10.2.2. Behavior Modification Techniques
- 3.10.3. Intervention with Families
  - 3.10.3.1. Advice for Parents and Caregivers
  - 3.10.3.2. Workshops and Family Emotional Support
- 3.10.4. Intervention Programs
  - 3.10.4.1. Group Therapy
  - 3.10.4.2. Educational and Awareness Programs

You will have a solid understanding of the cerebral and neuropsychological mechanisms that underlie Language and Speech Disorders"

04

Teaching Objectives

This Postgraduate Diploma is designed to offer physicians the most innovative tools for diagnosing and treating Oral Language and Speech Disorders. Through a comprehensive approach, graduates will develop skills in applied Neuropsychology, implementing accurate diagnoses and advanced therapies. In this way, graduates will become true leaders in the treatment of these disorders, significantly improving patient care.

You will acquire advanced clinical skills to identify different oral language and speech disorders, using cutting-edge neuropsychological tools"

General Objectives

- Use diagnostic tests and explain research techniques in Neuropsychology of Language
- Delve into the key concepts of Statistics for selecting samples
- Apply assessment techniques to diagnose language disorders and write speech therapy reports
- Analyze the linguistic effects derived from Neurodegenerative Diseases, such as Dementia and Multiple Sclerosis
- Define the concept of psychometrics and its relationship with Speech Therapy, understanding its application in the evaluation of Language and Communication Disorders
- Identify and diagnose Language Disorders in various contexts, considering both the clinical manifestations and the neuropsychological aspects involved
- Design and apply effective interventions for the treatment of speech disorders, adapted to the needs of the patient
- Develop skills to assess and adjust speech therapy interventions, based on scientific evidence and advances in the field

Specific Objectives

Module 1. Neuropsychology of Language

- Analyze the neuropsychological processes involved in the production and comprehension of language.
- Understand the effects of brain injuries on linguistic abilities

Module 2. Speech and Language Assessment and Diagnosis

- Use specific diagnostic tools to identify speech and language disorders
- Prepare detailed assessment reports for the planning of speech therapy interventions

Module 3. Speech Disorders: Assessment and Intervention

- Perform a detailed assessment of speech disorders using appropriate methods and tools
- Implement therapeutic strategies for the treatment of speech disorders

You will have at your disposal various multimedia resources such as interactive summaries, in-depth videos and real clinical case studies"

05

Career Opportunities

This university program from TECH offers physicians a unique opportunity to update their knowledge of Neuropsychology and the Diagnosis of Oral Language and Speech Disorders. Graduates will acquire advanced clinical skills to identify, assess and effectively treat various language disorders, improving their clinical skills and broadening their professional opportunities in this specialized field.

Are you looking to work as a Director of Neurology and Language Units? This university qualification will give you the keys to achieve this in just 6 months"

Graduate Profile

Graduates of this Postgraduate Diploma will be physicians highly skilled in diagnosing and treating a variety of oral Language and Speech Disorders. At the same time, they will possess advanced competencies in neuropsychology, enabling them to assess complex conditions and design effective therapeutic interventions. Additionally, these professionals will be well-prepared to lead clinical and research projects, improving patients' quality of life and contributing to the advancement of knowledge in this field.

You will master innovative psychotherapy techniques based on neurology to enhance communication and overall well-being.

- **Assessment and Diagnosis of Language Disorders:** Ability to conduct thorough evaluations and accurate diagnoses of speech and language disorders using specialized tools and methods to identify patients' needs.
- **Effective Therapeutic Intervention:** Capacity to design and implement appropriate therapeutic intervention plans for treating speech and language disorders, improving communication and quality of life.
- **Use of Psychometric Tools:** Proficiency in the application and interpretation of psychometric tools in speech therapy, supporting the assessment and monitoring of progress in the treatment of language disorders.
- **Research in Speech Therapy:** Ability to design and carry out research in the field of speech therapy, using scientific methodologies to contribute to the advancement of knowledge and the improvement of therapeutic interventions.

After completing the program, you will be able to use your knowledge and skills in the following positions:

1. **Physician Specialized in Language and Communication Disorders:** Responsible for diagnosing and treating conditions related to speech and language, collaborating with speech therapists and other professionals to develop effective treatment plans.
2. **Specialist in Neurological Assessment of Language Disorders:** Expert in evaluating language disorders related to neurological conditions, using clinical and imaging tests to make accurate diagnoses and guide treatments.
3. **Language Rehabilitation Consultant for Primary Care Centers:** Advisor on the implementation of language rehabilitation programs in primary care centers, collaborating with multidisciplinary teams to improve patient care for speech disorders.
4. **Coordinator of Diagnostic and Treatment Programs for Speech Disorders:** In charge of coordinating medical and therapeutic teams for the evaluation, diagnosis, and treatment of speech disorders, ensuring continuity and integrity of patient care.
5. **Physician Specialized in Language Neuropsychiatry:** Responsible for treating patients with language disorders stemming from neurological or psychiatric conditions, applying advanced knowledge in neuroscience and linguistics to develop personalized therapeutic strategies.
6. **Expert in Research and Development of Treatments for Language Disorders:** Leader of clinical research projects focused on developing new therapies for language disorders, contributing to the creation of innovative, evidence-based treatments.
7. **Physician in Education and Awareness of Language Disorders:** In charge of designing and leading educational programs aimed at both healthcare professionals and the general public, with the goal of raising awareness about language disorders and promoting early detection.
8. **Physician Specialized in Language Disorders in Children and Adolescents:** Responsible for the evaluation and treatment of language disorders in children and adolescents, working in collaboration with parents and speech therapy teams to ensure proper language development.
9. **Specialist in Rehabilitation of Language Disorders in Older Adults:** Specialist in the intervention and rehabilitation of language disorders in older adults, focused on improving their communication and quality of life through therapies adapted to their specific needs.

You will apply neuropsychological therapies for the comprehensive approach to multiple Speech and Language Impairments”

06

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.
The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

"At TECH you will NOT have live classes (which you might not be able to attend)"

The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

> *TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"*

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

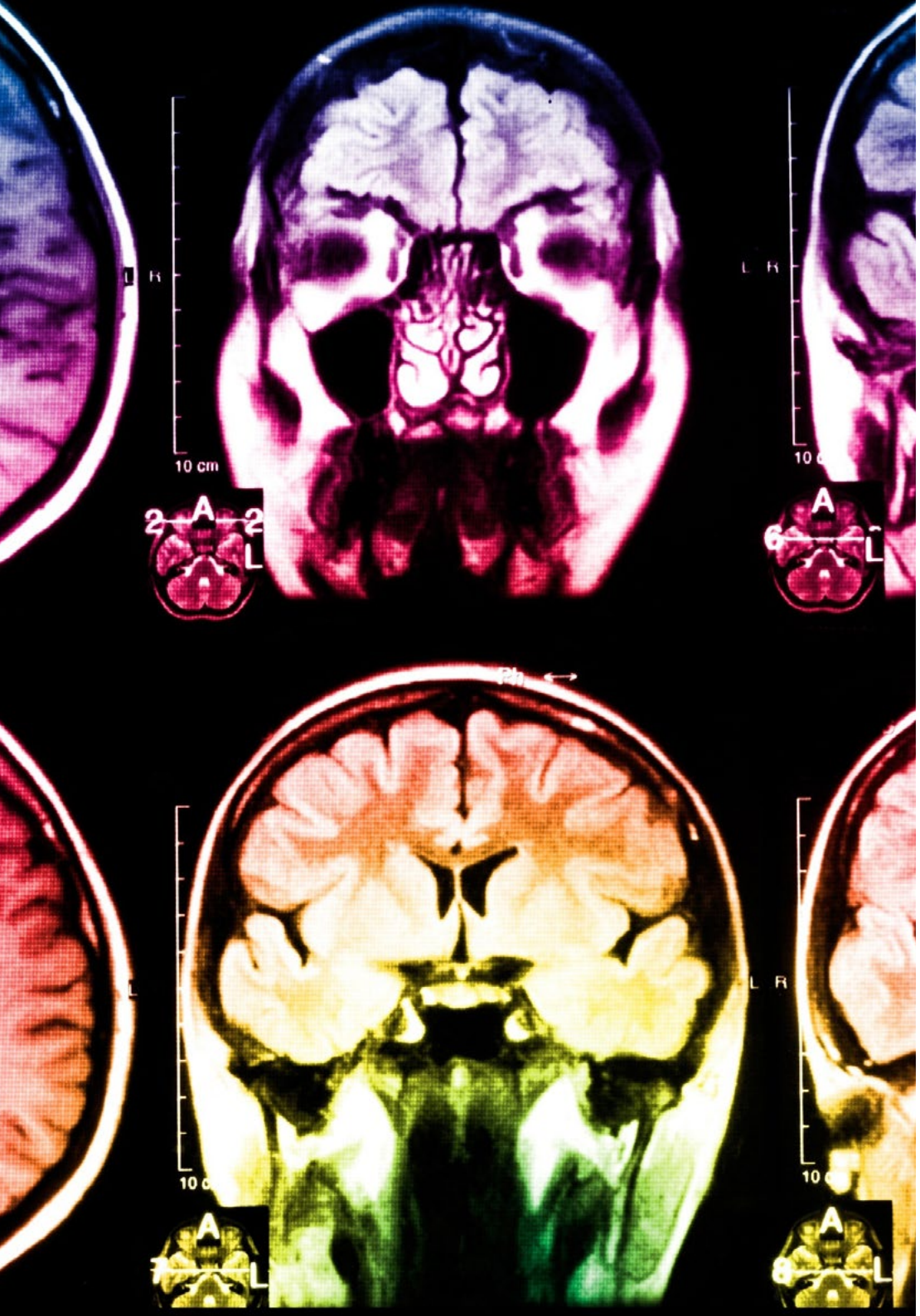
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.

The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
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.



The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:

Study Material

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

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.

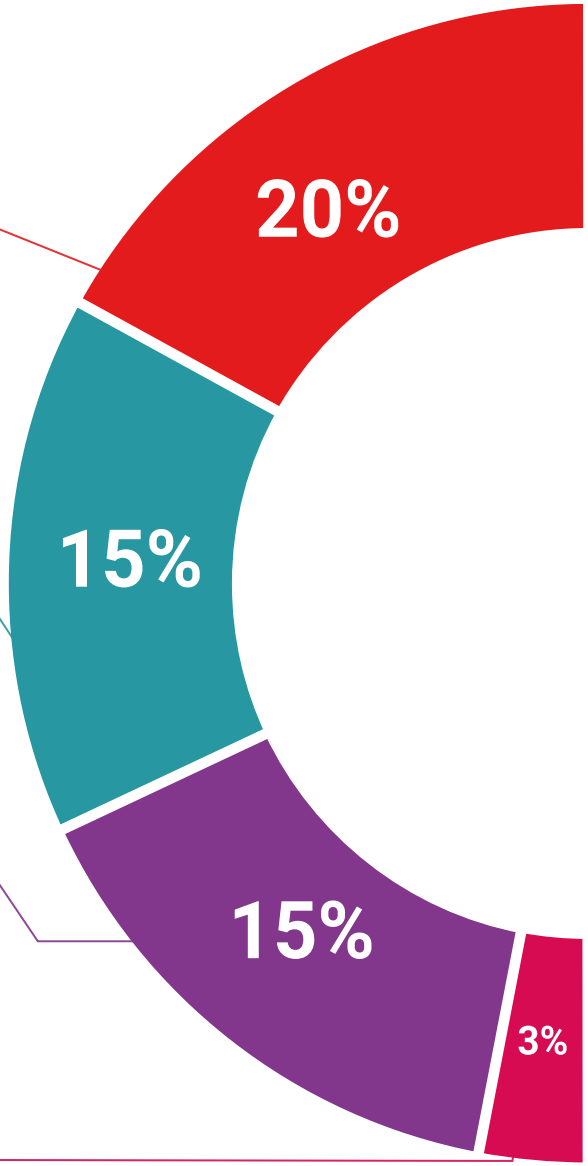
Interactive Summaries

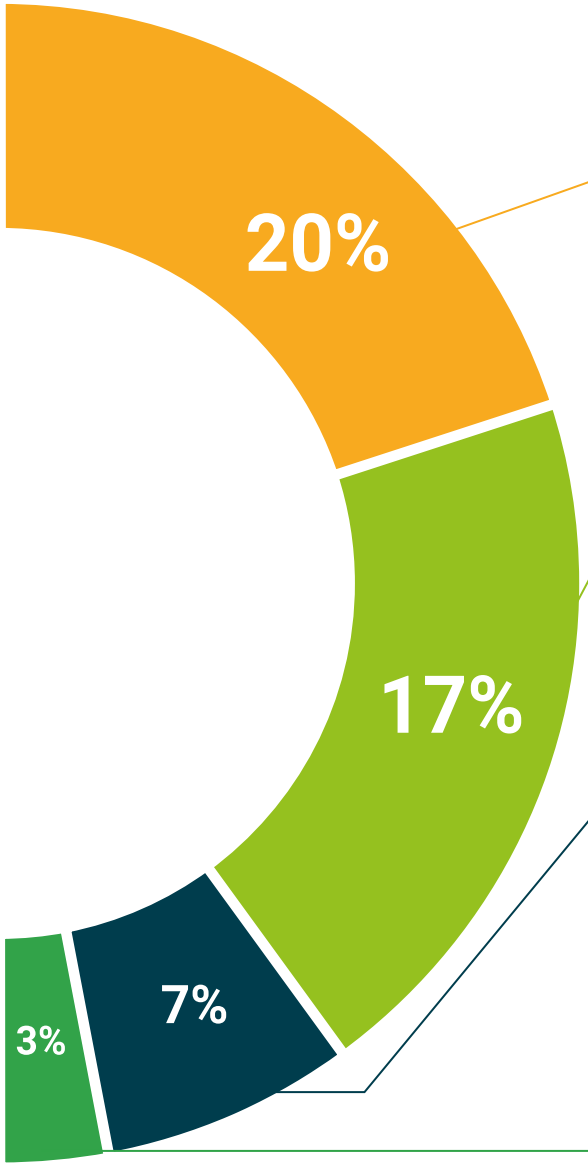
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

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 for 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

This Postgraduate Diploma in Neuropsychology and Diagnosis of Oral Language and Speech guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Diploma issued by TECH Global University.

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

This private qualification will allow you to obtain a diploma for the **Postgraduate Diploma in Neuropsychology and Diagnosis of Oral Language and Speech** endorsed by **TECH Global University,** the world's largest online university.

TECH Global University, is an official European University publicly recognized by the Government of Andorra ***(official bulletin)***. Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Neuropsychology and Diagnosis of Oral Language and Speech**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**

tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Neuropsychology and Diagnosis of Oral Language and Speech

This is a private qualification of 540 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
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

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

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Postgraduate Diploma

Neuropsychology and Diagnosis of Oral Language and Speech

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma

Neuropsychology and Diagnosis of Oral Language and Speech

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